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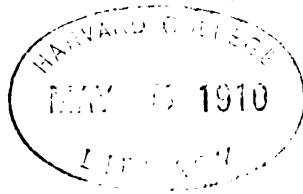


An Ethnologic
Dictionary
— OF THE —
Navaho Language.



THE FRANCISCAN FATHERS,
SAINT MICHAELS, ARIZONA.

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No. 86
Franciscan Fathers

PREFACE.

The philosophy of a people is exhibited to good advantage by a combined study of its language and archæology, as the one frequently elucidates the other. The present work is developed along these lines, and words bearing on a specific topic have been grouped together, while the information which has been added is frequently verified by a list of words in use. Works already published have not been consulted to a very great extent, as an endeavor was made to obtain original information from native informants. But as these were much at variance it became necessary to select only the most reliable and consistent information, which is here presented in the shape of brief notes. The illustrations, too, have been largely obtained from native informants, or drawings made were submitted to them for corrections. A large number are drawn from actual specimens on exhibit in the Museum of the Brooklyn Institute of Arts and Sciences, Brooklyn, N. Y., while that of the Navaho Smithy is a reproduction from the *Navaho Silversmiths*, by Dr W Matthews.

We also owe some suggestions to the following authorities who have been cited or consulted:

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FRANCIS FATHERS.

Saint Michaels, Arizona,
April, 1910.

CONTENTS.

	<i>Page.</i>
INTRODUCTORY	23-34
The Name Navaho.....	23
Orthography and Pronunciation of the word Navaho.	26
Origin and Stock of the Navaho.....	26
Migration of the Denes.....	28
Site and Area of the Navaho Country.....	30
Physical Features of the Land.....	31-32
Population.....	33-34
COSMOGONY AND NATURAL PHENOMENA	35-117
THE UNIVERSE	35
EARTH AND SKY	35-36
SUN AND MOON	37-41
Time.....	37-39
Light, Shade, Mirage.....	40
Eclipse, Phases of the Moon.....	41
STARS AND CONSTELLATIONS	42-45
CLOUDS	45
MIST OR FOG, WIND AND STORM, RAIN AND RAINBOW ..	46
SNOW AND ICE	47-48
WATER	49-52
WEATHER AND TEMPERATURE	53-54
DIRECTION AND DIRECTIONAL ASSIGNMENT	55-57
THE CALENDAR	58-59
LIGHTNING AND THUNDER	60
THE LAND	61
Mountains and Valley, Stone, Cañons, Minerals....	62-64
Clay, Fire, Smoke, Ashes, Charcoal.....	65-67
COLOR	68-72

MEASURE, DISTANCE, SURFACE AND SOLID	73-76
THE NUMERAL SYSTEM	76-79
WORDS REFERRING TO THE ANATOMY	80-86
WORDS REFERRING TO DISPOSITION AND THE FACULTIES	86-91
WORDS REFERRING TO VARIOUS ACTIONS	91-105
SICKNESS AND DISEASE	105-111
Special Diseases and General Indisposition	108-111
REMEDY	112-117
PERSONS, PLACES, ANIMALS, PLANTS	118-220
NAMES OF PERSONS	118
PERSONAL NAMES	119-129
War Names, Patronymics	119
Names of Boys, Names of Girls and Women	120-121
Names of Men, suggested by physical distinction or defect, by occupation and trade, by posses- sion and clan	121-124
Names of Distinguished Chiefs and Warriors	125
Names of Signers to Treaty	126
Names of American Residents	126
Tribal Names, and Early Mexicans	127-129
NAMES OF PLACES	130-138
Suggested by Buttes, Peaks, Springs, or local peculiarities	130-134
Names of Neighboring Pueblos	135
Names of Neighboring and Sacred Mountains	136-137
NAMES OF ANIMALS	138-178
QUADRUPEDS	139-154
The Bear, Deer, Felines, Coyote	139-140
The Rabbit, Squirrel, Rodents, Badger, etc	141-142
Modern Animals, the Dog, Cow, Sheep, Goat	143
Anatomy of Animals	143-145
The Horse	145-154
The Saddle, the Bridle, the Quirt, the Harness	148-151
The Wagon and its parts	151-153
Horse Diseases and Horse Racing	153-154

REPTILES	155-156
WATER ANIMALS, FISH.....	156
NAMES OF BIRDS.....	157-163
NAMES OF INSECTS.....	164-170
SACRED NAMES OF ANIMALS.....	171-178
CLASSIFIED PLANT LIST.....	179-203
NAVAHO FOODS.....	204-220
Corn Foods, Esculent Herbs and Berries.....	206-211
Meat and Venison.....	211-216
Commercial Articles, Beverages.....	216-217
Cooking Utensils, Saying Grace.....	218-220
ARTS AND INDUSTRIES.....	221-345
WEAVING.....	222-255
Legend of Weaving.....	224
Sorting, Washing, Carding, Spinning Wool.....	224-227
Dyeing Wool.....	228-234
The Loom and its parts.....	235-240
Weaving Implements.....	240-243
Kinds of Weave.....	243-245
Use of Loom and kinds.....	245-250
Designs in Modern Blankets.....	250-255
KNITTING.....	255-256
SHEEP RAISING.....	257-259
AGRICULTURE.....	259-270
Corn and its parts, Beans, Pumpkins, Grain, Hay and Wheat.....	260-262
Farms, Irrigation, Land Tenure.....	263-265
Planting and Planting Sticks, Hoes, Granaries....	265-267
Modern Implements and Tools.....	267-270
SILVERSMITHING.....	271-285
Tools and Implements.....	272-279
Fabrics in Silver.....	277-284
Designs in Silverware.....	285
POTTERY MAKING.....	285-290
BASKETRY.....	291-297

WICKERWORK.....	297-300
BEADWORK, DRILLING BEADS.....	300-301
LEATHER AND RAWHIDE WORK.....	302-316
Tanning and Dyeing Leather.....	302-304
Shoemaking, Stitches, Dancing Shoes.....	305-309
Leather Fabrics, Platting.....	311-315
IMPLEMENTS OF WAR AND THE CHASE.....	316-326
Spear and Shield, Bow and Arrow, the Quiver...	316-321
Game Traps, Bird Snares, Boomerang, Slings...	322-325
The Gun and its parts.....	325-326
NAVAHO HOUSES.....	327-346
The Sudatory.....	341-345
RELIGION.....	346-422
SYNOPSIS OF LEGEND.....	347-361
The Lower Worlds, Peoples of the Dark, Red and Blue Worlds.....	347-349
The Eleventh World, the Emergence, the Twelfth World.....	349-352
Creation of the Visible World, Earth, Sky, Stars and Vegetation.....	353
Bearers of Sun and Moon.....	353
Sex of Peoples.....	354
The Changing Woman (Esdzanadle).....	355
Creation of Man.....	356
Man-eaters or Monsters.....	357-359
Slayers of Monsters.....	359
The Woman who Becomes a Bear. The Flood.....	360
THE CHANTS, LIST OF.....	361-365
THE WAR DANCE.....	366-375
Construction and Bearing of the Rattlestick.....	366-368
The Girls' Dance.....	369-371
The Blackening of the Patient, Addenda.....	371-375
PUBLIC EXHIBITIONS AND DANCES.....	376-379
CHOICE OF CHANT AND EXPENSES.....	379-380
CEREMONIAL HOGAN.....	380

THE CHANTER OR SHAMAN, HIS POUCH.....	381-382
THE HOLY ONES, MEANING OF WORD HASHCH-E.....	383
THE MASKS.....	384-393
Number of.....	384-385
Dedication and Dressing.....	386-392
Imitations of Navaho Masks.....	393
THE SACRIFICE (STONES, TOBACCO, ETC.).....	394-395
THE PRAYERSTICK.....	396-397
THE SAND PAINTING.....	398
POLLEN.....	399
RATTLE AND DRUM.....	401
MISCELLANEOUS PARAPHERNALIA.....	402-421
Equipment of Chants.....	402-404
Liniments.....	404-405
Medicine, Medicine Cups, Spoons, etc.....	406-409
Sacred Clay and Precious Stones.....	409-411
Charms, Pressing of the Limbs.....	411
Use of Birds and Animals in Ceremony.....	412-413
Collars, Shoulder-bands and Wristlets.....	413
Use of Plants in Ceremony.....	414
The Bull-roarer.....	414
Fire-drill, Pokers, Unraveling, etc.....	415-417
Ceremonial Bath.....	417
Incense, Law of Butts and Tips, Bow and Arrow, Spreads.....	418
Messengers, Legerdemain, etc.....	419
SOCIOLOGY.....	422-512
CIVIL ECONOMY, INSTALLATION OF CHIEFS, SLAVERY.....	422-424
THE GENTILE SYSTEM.....	424-433
KINSHIP, NAMES OF RELATIVES.....	434-436
WAR.....	438
FEUDS.....	439-443
Swearing and Imprecations.....	444
MARRIAGE AND BIRTH CUSTOMS.....	446-452
MORTUARY CUSTOMS.....	453

NAVAHO COSTUME.....	457
Headgear.....	460
Modern Costume.....	463
Bedding.....	467
NAVAHO CRADLES.....	467-474
THE CHASE	475
NAVAHO GAMES.....	479-489
Games of Dice.....	479
Stick Dice.....	481
Hoop and Pole.....	482
Ball Race.....	484
Ball Game (Baseball).....	484
Hidden Ball (Moccasin Game).....	485
Shinny.....	487
Archery, Cat's Cradle.....	488
SOCIAL CUSTOMS	489-512
Barter.....	489
Coin	490
Begging, Borrowing.....	492
Bugaboos, Carving.....	495
Spitting.....	497
Flagellation.....	498
Gaping	500.
Dreams	501
Latrines, Laughing.....	502
Lying and Stealing.....	503
Prostitution.....	504
Salutation, Scarification.....	505
Smoking	506
The Taboo.....	507
Warning, Transportation.....	509
Weeping.....	510
Whistling (Whistles).....	511
INDEX	513

LIST OF ILLUSTRATIONS.

	<i>Page.</i>
Illustrating Ritual Method of Turning.....	55
Fire-drill	65
Native Bridle	150
Cactus Picker	211
Cooking Pot.....	218
Stirring Sticks.....	219
The Loom and Its Parts.....	221
Woman's Dress.....	246
Blue Shirt.....	248
Shirt with Red Stripes	248
Woman's Sash.....	249
Designs in Modern Blankets (figures 1-41).....	251-254
Figure of Corn Plant.....	260
Planting Sticks (straight and notched).....	265
Hoes of Wood and Bone (straight and curved).....	266
Navaho Smithy	272
Silver Necklaces (round and oval beaded).....	278
Silver Buttons (varieties of).....	279
Silver Belt.....	280
Silver Conchas.....	281
Silver Bridle.....	281
Silver Bracelets (three kinds).....	282
Silver Wristlet.....	282
Silver Rings.....	283
Silver Earrings.....	284
Water Bottle.....	286
Earthen Bowl.....	287
Pot-drum.....	289
Native Basket	291
Wicker Bottle.....	297
Waterbag.....	298
Carrying Basket.....	299
Bow-drill	301
The Spear.....	316
The Shield	317
Bow and Arrow.....	318
Arrow Plane (Stone).....	319

Arrow Plane (Bone).....	319
Quiver.....	321
Game Trap.....	322
Bird Snare.....	323
Powderhorn	325
Ladder	327
Yucca Roof Mat.....	327
Conical Hogan.....	330
Walled Log-house.....	333
Shelter	334
Native Broom.....	341
Sudatory	342
Horned Monster.....	357
Water Horse	358
Water Ox	359
Method of Making Incisions on Rattlestick.....	367
The Rattlestick.....	367
The Torch.....	375
Corral	376
Medicine Bag	377
Eye and Mouth on Mask.....	387
Sacrificial Basket.....	397
Pollen Bag.....	399
Hoof Rattle.....	401
Gourd Rattle.....	401
Hide Rattle.....	401
Tortoise Medicine Cup.....	407
Gourd Medicine Cup.....	407
Medicine Spoons.....	407
Crane Bills.....	408
Stone Knife of Slayer of Monsters.....	411
Bull-roarer.....	414
Fire-drill.....	415
Fireplace in Fire Ceremony.....	415
Yucca Star.....	415
Small Hoops.....	416
Wide Hoops.....	416
Arrows for Swallowing.....	419
Yucca Blanket.....	457
Buckskin Shirt.....	457
Buckskin Pants	459
Buckskin Belt.....	459
Mountain Lion Cap (figure 1).....	461
Wildcat Cap (figure 2).....	461
Whitish Cap (figure 3).....	461
Smooth Cap (figure 4).....	462
Pronged Cap (figure 5).....	462
Cap with Opposite Peaks (figure 6).....	462

Feathered Cap (figure 7).....	462
Hair Broom	464
Yucca Mat.....	467
Face Cover Cradle.....	468
Laced Cradle.....	468
The Whole Cradle.....	469
The Cradle Proper.....	469
Canopy Bows.....	470
Woman with Cradle.....	471
Baby Swing	472
Seven Card Dice.....	479
Seven Card Dice Sets.....	480
Bouncing Stick Game.....	482
Hoop	482
Pole, Illustrating Turkey Feet on Pole.....	483
Ball.....	485
Shinny Sticks and Ball.....	488
Bugaboo Owls.....	495
Hopi Doll and Prayerstick.....	496
Carved Duck and Prayerstick.....	496

KEY TO THE ALPHABET.

THE CONSONANTS.

The greater number of consonants have been adapted from the English alphabet, though their pronunciation in Navaho is more marked than in English, and each character is given a uniform value throughout.

b as in English been.

h as in English hemp.

d “ “ den.

j “ “ judge.

g “ “ gig.

k “ “ ken. This

character, unless clicked, is almost uniformly followed by an aspiration; hence, it is written kh. The aspiration is at times very guttural, which is indicated by kq.

l as in like.

w as in will.

m and n as in man.

y “ yield.

s as in sit, city.

z “ zone.

p, r, c, v, qu, do not occur as in English, and f occurs only in foreign words. t does not occur as a single character, but is either clicked or aspirated.

CONSONANTS PECULIAR TO NAVAHO.

Some sounds of the Navaho are expressed by digraphs, hence:

ch as in church. dl as in ordinary l preceded by d.

dz “ adze. ds is the surd of dz.

gh, for which there is no approximate equivalent in English. This is a guttural g to which the rolling sound of r is added.

q represents the sound of gh in Loughlin, Dougherty, or German ch in lachen. An intermediary between h and q has been written with h to facilitate reading. Frequently this gut-

tural aspiration is added to the harder consonants; hence, in addition to *kq*, there are such others as *chq*, *tsq*, *tq*.

kw represents the sound of English *qu* in *quick*.

qu, however, is similar to the sound heard in *when*.

ł represents a strongly aspirated *l*, for which the English has no equivalent. The sound is produced by taking and holding the position for pronouncing an ordinary *l* and pressing the air through the sides of the mouth. At times this is preceded by *t*; hence,

tl is a combination of *t* and *ł*.

tl' represents a sharp, lateral, exploding sound, produced by forcing the aspiration through the side of the mouth, closed for the pronunciation of a combined *tl*. The expulsion is rapid and simultaneous with the pronunciation of *t* and *l*. Many mistake *ł*, *tl* and *tl'* for *kl*, *thl*, and similar oddities.

sh always as in *shall*.

tq is a strongly aspirated *t*, or, rather, *q* preceded by *t*.

ts as in German *zanken*, or English *pretzel*.

wh is a combination of *ghw* and often interchanges with simple *w* or *gh*.

zh as *z* in *azure*.

CLICKED SOUNDS.

ch, *k*, *t* and *ts* are frequently clicked, i. e., pronounced entirely separate from the following vowel; hence, a special character is used in representing this peculiarity—*čh*, *k*, *t*, *ts*. *k*, in addition, is very guttural and explosive.

VOWELS AND DIACRITICAL MARKS.

The vowels have the continental sound. Syllabic quantity is indicated by long and short marks placed above the vowel, thus: *ā*, *æ*, *ē*, *ī*, *ō*, *ū*, for long vowels, and *ă*, *ǣ*, *ĕ*, *ĭ*, *ô*, *ÿ*, for the short syllables:

.

ā as in fār.	ǣ as in ǣrt.
æ “ bād.	æ “ bāt.
ē “ dāte.	ě “ děbt.
ī “ pīque.	ī “ pīn.
ō “ nōte.	ǫ “ dōne.
ū “ pōöl.	ǔ “ pǔll.

Nasality and syllabic quantity are also indicated by distinctive marks placed over the vowel—ā, æ, ē, ī, ō, ū, for long nasal sounds; â, æ̃, ê, î, ô, û, for the short nasal sounds.

As no general rules for the accent could be laid down, the greater stress put upon certain syllables is indicated by a special mark placed over the vowel or diacritical mark; thus, á, í, é, á, etc. Secondary accents and pitch are not indicated.

An abrupt close of the vowel sound is indicated by ' , placed after the vowel, while the hiatus preceding a vowel is indicated by ' preceding it. In this instance the vowel is sounded to its full value, as, for instance, a'â, where the two have a distinct inception. When this mark precedes n, the latter frequently has the sound of dn, as in *dnieper*.

The hiatus proper (') placed after a vowel indicates a fairly guttural exhalation, which at times is equivalent to h, and even q. Frequently this sound has been rendered with h.

ń indicates an accented n.

Where consonants or vowels are doubled or trebled they should invariably be sounded as often as they appear. In compounded words, and other instances, a duplication of consonants has been omitted when a fairly careful pronunciation justified the omission. Moreover, vowels are often interchanged, so that many words occur in several forms, some instances of which have been noted in brackets.

In regard to the verb, the past and future tenses have been added in most instances, and are placed in brackets immediately following the present tense of which, ordinarily, the form of the first person singular is given.

An Ethnologic Dictionary of the Navaho Language.

INTRODUCTORY.

THE NAME NAVAHO.—"How and when the name Navaho originated," says Dr Washington Matthews, in *Navaho Legends*, note 1, page 211, "has not been discovered. It is only known that this name was given by the Spaniards while they still claimed the Navaho land. The name is generally supposed to be derived from '*navaja*,' which means a clasp-knife or razor, and to have been applied because the Navaho warriors carried great stone knives in former days. It has been suggested that the name comes from '*navajo*,' a pool or small lake. The Navaho call themselves *diné*, or *diné*, which means simply, men, people."

The word Navaho, or, originally, *Navajo*, is first mentioned and applied to this tribe of Indians by Fray Alonzo Benavides, O. F. M., in his *Memorial to the King of Spain*, written in 1630. After describing the Gila Apaches, Benavides says that more than fifty leagues north of these "one encounters the Province of the Apaches of Navajo. Although they are the same Apache nation as the foregoing, they are subject and subordinate to another Chief Captain, and have a distinct mode of living. For those of back yonder did not use to plant, but sustained themselves by the chase; and to-day we have broken land for them and taught them to plant. But these of Navajo are very great farmers, for that is what Navajo signifies—great planted fields."

From the expression, "the Apaches of Navajo," it is evident that the word Navaho was originally not given to the people, but was the name of the province or territory in which they lived, or, in other words, the Indians themselves were called Apaches, and their country was called Navajo, until later the name Apache was dropped and the name of the territory applied to its inhabitants. Just as we say the Pennsylvanians, or the Texans, instead of the Americans of Pennsylvania, or the Americans of Texas.

As to the signification of the word *Navajo*, Benavides says it means "great planted fields." Not only Benavides, but also such eminent authorities as Dr Brinton and Bandelier tell us that the Navaho, when first met by the Spaniards, were tillers of the soil, erected granaries for their crops, and cultivated their fields by irrigation. Now, the Spanish dictionary has the word "*nava*," meaning a flat piece of land, a plain, a field. From *nava* the word *Navajo* may possibly be derived, just as *lagunajo* is from *laguna*, or *yerbajo* from *yerba*, or *latinajo* from *latin*. The old Spanish suffix, "*ajo*," like the modern Spanish suffix "*acho*," seems to give to a word, not only an augmentative, but also a depreciative signification; thus, *laguna* means pond or lake, and *lagunajo* pool or puddle; *yerba* means herb, and *yerbajo* weed; *latin* means latin, and *latinajo* bad, ungrammatical latin. According to this, since *nava* means field, *navajo* would mean a large, more or less worthless field.

The only difficulty in this derivation is the fact that the word *navajo*, as derived above, has the accent on the second last syllable; thus, *navájo*, while in the proper name, Navaho (or Navajo), the Americans place the accent on the first syllable, *Návaho*, and the Mexicans and Indians on the last syllable, *Nāvājó* and *Nawehó*. Taking the accented syllable as a basis of comparison and derivation, the following extract of a short article on the *Origin of the Name Navaho*, by Edgar L Hewett, in the *American Anthropologist*, January-March number, 1906, page 193, is of interest, and has much in its favor.

“In the second valley, south of the great pueblo and cliff village of Puye, in the Pajarito Park, New Mexico, is a small pueblo ruin, known to the Tewa Indians as Navahu, this being, as they claim, the original name of the village. The ruined villages of this plateau are all Tewa of the pre-Spanish period. This particular pueblo was well situated for agriculture, there being considerable acreage of tillable land near by—far more than this small population could have utilized. The old trail across the neck of the mesa to the north is worn hip-deep in the rock, showing constant, long-continued use. I infer that these were the fields of not only the people of Navahu, but also of the more popular settlements beyond the great mesa to the north where tillable land is wanting. The Tewa Indians assert that the name ‘Navahú’ refers to *the large area of cultivated lands*. This suggests an identity with Navajo, which Fray Alonzo Benavides applied to that branch of the Apache nation, then living to the west of the Rio Grande, beyond the very section above mentioned.” See quotation from Benavides above.

“These facts may admit of two interpretations—the expression, ‘the Apaches of Navajo,’ may have been used to designate an intrusive band that had invaded Tewa territory and become intrenched in this particular valley. On the other hand, the Navaho——may have occupied such areas of cultivated lands, that their habitat, wherever it was, would have been known to the Tewa as Navahu, ‘the place of great planted fields.’ If the first interpretation is correct, it would doubtless be verified by archeological evidence at the ruin of Navahu. It would seem, at any rate, that the Tewa origin of the tribal designation, *Navaho*, is assured.”

Bandelier, in his *Report on the Southwest*, does not mention Navahu as the name of a ruin or village visited by him. But he has a lengthy description of Puye and other ruins of that region. The Santa Clara Indians, who are of the Tewa, or Tehua nation, stated to him that the cause of the abandonment of the pueblos were drought and wars with nomadic tribes. The

Navaho still speak of a region, which they call "dinéṭqǎ" (diné country), and which their fathers occupied before they came to their present habitat. This region, according to their traditions, corresponds to the modern Jemez Country, and the Tewa Country. So the name Navaho may possibly be of Tewa origin, and brought from dinéṭqǎ. It is somewhat remarkable that both derivations, the Spanish as well as the Tewa, confirm the interpretation of Benavides.

ORTHOGRAPHY AND PRONUNCIATION OF THE WORD NAVAHO.—In this work the form Navaho is used instead of the older and more correct form, Navajo. This, for the following reasons: (1) It has been suggested by several prominent ethnologists that this form be adopted for this work. (2) Navaho has been declared by the Bureau of Ethnology as its official form; it is used in all its official reports and bulletins, and has been copied by all who are connected with the Bureau, by many authors and writers of note, and by others. (3) Last and not least, the form Navaho approaches nearest to the English pronunciation, and offers the least difficulty to the general reader.

In the English pronunciation of the word Navaho, the first a is short and sounded as a in "hat;" the second a is indistinct; the h is strongly aspirated; the final o has its natural sound, and the accent is on the first syllable. Thus, in reading the word Navaho (or Navajo), the vowels, and the v and h (or j), have about the same sound as in the sentence, "have a hoe." The Mexicans place the main accent on the last syllable, pronounce the h slightly guttural, and sound the a as in "ma and pa." The Navaho themselves, when using this name, pronounce it thus, Na-we-hó.

ORIGIN AND STOCK OF THE NAVAHO.—For any one who believes in the unity of the human race, and the divine inspiration of the Bible, there can hardly be any doubt that the Navaho are of Asiatic origin. They are the most southern

branch of the great Dene nation of Indians, now commonly known as the Athapaskan stock. All the tribes belonging to this stock or family speak dialects sufficiently similar in phraseology, construction, root-words, and other grammatical peculiarities, to amply justify the inference that they are descended from one common parent stock. They all call themselves by a name meaning men or people, which is more or less similar in all the dialects. Thus, we have *dane*, *dene*, *dine*, *dune*, *dindje*, *nde*, *tinneh*, *teni*, etc.

Of the extent of territory over which the Athapaskan stock is spread, Father A G Morice, O. M. I., says: "No other aboriginal stock in North America, perhaps not even excepting the Algonquian, covers so great an extent of territory as the Dene. The British Isles, France and Spain, Italy, and two or three of the minor European Commonwealths, taken together, would hardly represent the area or the region occupied by that large family."

The historian, Hubert Howe Bancroft, in his *Native Races of the Pacific States*, tells us "the Tinneh are a people whose diffusion is only equaled by that of the Aryan or Semitic nations of the Old World. The dialects of the Tinneh languages are by no means confined within the limits of the Hyperborean division. Stretching from the northern interior of Alaska down into Sonora and Chihuahua, we have here a linguistic line of more than 4,000 miles in length, extending diagonally over 42 degrees of latitude, like a great tree, whose roots compass the deserts of Arizona and New Mexico, and whose branches touch the borders of Hudson Bay, and of the Arctic and Pacific Oceans."

Of the northern Athapaskan or Dene Tribes in Canada and Alaska, Fr Morice says: "West of the Rocky Mountains they are to be found—to the borders of the Eskimo tribes, while on the east side of the same range they people the immense plains and forests which extend from the Northern Saskatchewan down almost to the delta of the Mackenzie River. From west

to east they roam, undisputed masters of the soil, over the almost entire breadth of the American continent, though a narrow strip of seashore country separates their ancestral domain from the waters of the Pacific and those of the Atlantic. With this unimportant restriction, they might be said to occupy the immense stretch of land intervening between the two oceans."

South of the Canadian boundery, Déné tribes, or remnants of them, are found in Oregon, Northern California, Arizona, New Mexico, Texas, and down into Old Mexico, the Navaho (diné), the Apaches (ndé), and the Lipanes (ipa-ndé), being the most southern. Thus, there is a complete linguistic line from the banks of the Gila River in Southern Arizona, northward, almost to the very shores of Behring's Straits, and from the sunny mesas and plateaux of Arizona and New Mexico, up to the snow-clad peaks and plains of the Arctic regions, are found tribes speaking kindred Déné dialects, which certainly points to an Asiatic origin for the Navaho, as the line of cognate languages and dialects from the British Isles to India shows the Indo-European or Aryan stock, and the Asiatic origin of the nations of Europe.

MIGRATION OF THE DÉNÉS.—None of the Dene tribes have any clear and distinct traditions as to how they originally came to the land which they at present inhabit. But a few dim and vague myths and legends hint at the migration of their forefathers in times out of mind.

In 1863 Father Petitot, O. M. I., was told the following by the Yellow Knives, a Dene tribe at the Great Salt Lake, concerning their origin: "In the beginning there existed nothing but a giant, so tall that his head swept the vault of heaven, for which reason he was called *Yakke-elt'ini*. He lived to the west, and barred our entrance to this desert land. A chase was made after him, he was killed, thrown to the ground, and his body fell so as to connect both lands. His body being petrified served as a bridge for the periodical migrations of the reindeer. His head is in our island, while his feet are on the western land."

A few years later Mgr. Tache, Bishop of St. Boniface, found the same tradition among the Chipewyans of Lake Athabasca. The Hare Skins, living in the Arctic Circle, call the Rocky Mountains the dorsal spine of the earth.

In 1874 Father Petitot, visiting a more southern tribe, the Thi-lan-ottini (*People-at-the-End-of-the-Head*), heard the same tradition when inquiring after the etymology of their name, the only difference being that the head of the fallen giant struck near their habitat, while his feet rested far away in the north-west.

Scant remnants or traces of this tradition are found among the Navaho of to-day. In their legends they tell of yei tso, a big, strong and mighty giant, the greatest and fiercest of all the alien gods, whose father is said to have been a stone. "About 40 miles to the northeast of the top of Mt. San Mateo," says Dr Matthews, in *Navaho Legends*, note 138, page 234, "there is a dark, high, volcanic hill, called by the Mexicans, El Cabezón, or the Great Head. This is the object which, according to the Navaho story-tellers, was the head of yei tso." Petrified wood is still called by the Navaho, yei bitsin; yei, or giant's bones, and the numerous lava flows of New Mexico are called yei bidil, or giant's blood.

If sufficient allowance is made for the often trivially vivid and fanciful imagination of the Indian, it is not difficult to recognize in this an embellished tradition of their migration from Asia to America, either over the frozen Straights, or along the Aleutian Islands. Besides, some of the tribes, as the Hare Skins, Quarrelers, and others, have traditions of other Dene tribes living on a western continent. The Navaho, too, have a tradition, although rather vague, of some people who belong to them, and who live far away. Although some place their home in the north, others in another direction, or do not know in what particular direction to place it, yet there is no doubt as to the tradition itself, since they have a special name for these people, calling them *diné nahoxllóni*, i. e., they are also *diné*, or Navaho.

How or when the Navaho entered their present country is, and may ever remain, a subject of speculation. According to some authorities they came in the thirteenth century, while others place their advent in the fourteenth or fifteenth century. At any rate, the first Spanish explorers and missionaries found them—*Los Apaches de Navajoa*—in full possession of their territory in northern New Mexico, from where the fathers and grandfathers of the present generation moved farther westward to the region which they now actually occupy. They have no traditions about the people who inhabited the numerous cliff dwellings and ruins scattered throughout their country, which shows that the ruins were already empty and forsaken when they arrived. Some of the cliff dwellings have, in consequence, been taken up into their myths as the abodes of *yei*, or gods. From this it would seem plausible that the Navaho have their homes in the Southwest about five hundred years.

The home of the Athapaskans was far to the north; the whole interior of Alaska is still peopled with tribes of that stock. It is, therefore, likely that the Navaho, being the foremost of these roaming, migratory tribes, traveled by slow movements, and pushed on southward by easy stages, along the eastern range of the Rocky Mountain region, until they met the sedentary Pueblos of New Mexico, in their fixed homesteads and permanent villages, where their further progress was arrested, and where they eventually established themselves. Later, the Apaches and Lipanes separated from the main body and went still further south.

For the manner in which the Navaho themselves explain their origin, and their coming into their present country, see article on "The Lower Worlds."

SITE AND AREA OF THE NAVAHO COUNTRY.—The Navaho country, or reservation, situated partly in the northeastern corner of Arizona, and partly in the northwestern corner of New Mexico, is at present the largest Indian reservation in the United

States. It lies between the 35 and 38 degree of latitude and the 108 and 110 degree of longitude. The original treaty reservation has several times been enlarged and extended by the addition of new territory, the last extension having been made very recently, so that the reservation now contains 12,360,723 acres, or about 19,313 square miles, or about covers the area of New Hampshire, Vermont and Rhode Island, with a margin. Besides, the Navaho still occupy off the reservation 2,304,000 acres, or about 3,600 square miles. In this is not included the acreage of the Moqui reservation, which is now totally surrounded by Navaho land, and upon which almost 2,000 Navaho are living.

PHYSICAL FEATURES OF THE LAND.—The greater part of the Navaho country is a bare and barren desert. It is traversed by a range of mountains from northwest to southeast. The north-western end of this range is called the Lukachukai Mountains (*lukachugai*, *white reed patches*), the central part is called the Tunicha Range (*tqontsa*, *large water*), and the southeastern end the Chuska Range (*choshgai*, *white spruce*). The higher regions of this range are covered with a splendid growth of white pine (*pinus ponderosa*). At a lower level the piñon (*pinus edulis*) predominates, and still lower the slopes are covered with forests of red cedar (*Juniperus virginianus*) and juniper (*Juniperus occidentalis*). Patches of scrub-oak are to be found anywhere on the mountains, while in the cañons cottonwoods, box elder, aspen, alder, walnut, peach, and a few other species of trees, thrive.

Beside the main range of mountains, there are a few isolated groups, for instance, the Carrizos (*dził náozili*, *mountain surrounded by mountains*) in the northeast, and the *dził Mjín* (*Black Mountains*) in the west. The mountains are cut up and reft by deep-gorged, tortuously winding cañons, through which the rain, falling on the mountains, is drained out into the valleys. There are no live rivers in the Navaho country, except the San Juan

in the northeast, and the Little Colorado in the southwest. On the reservation a few uncertain creeks, springs, and floods from the cañons, must be depended upon for irrigation. In some localities there are signs of abundant underground water. The annual rainfall averages from 10 to 14 inches and is usually confined to two short seasons, in the spring and in the fall. The greater part of this falls between the latter part of July and the forepart of September. The spring rains are not reliable, and both seasons are separated by about three months of absolute drought.

The altitude averages from 4,000 feet in the lower regions to 6,000 and 7,000 feet in the higher parts, while the mountain tops are 9,000 and 10,000 feet. Owing to this high altitude the nights are cool and pleasant all year round, the winters are long and cold, and the season for maturing crops is short. The spring is usually very stormy, with high southwestern winds, and the summer is very hot, although it is always pleasant in the shade, and the heat cools off rapidly after sunset.

Large deposits of bituminous coal are found in various parts of the reservation, while other parts present the appearance of having once upon a time been burnt out. Traces of volcanic activity can be noticed in many places. No precious metals or other minerals of value have, till now, been discovered, at least, not in paying quantities, although considerable prospecting has been, and is still being done in this territory.

The valleys of the Navaho country, on first sight, present the appearance of broad, rolling wastes, covered in some places by sagebrush, cactus, yucca, greasewood, and bunches of grass. The valleys, as a rule, are destitute of trees, except where irrigation is practiced, or where a sufficient amount of underground water is near enough to the surface. In such places cottonwoods, and other trees, thrive well, as also fruit trees, grains and vegetables.

For further references see respective articles—*Flora, Fauna, Agriculture, etc.*

POPULATION.—According to the latest Government census, the Navahos number considerably more than 27,000. These figures are undoubtedly too high, and are the result of averaging and guessing rather than of an actual individual count. It would, too, be a very difficult task, in fact next to impossible, to take an accurate numerical census of the Navaho tribe, owing to peculiar sociological and topographical circumstances. In the first place, about one-third or more of the tribe live scattered about outside of the reservation limits, some being found as far as twenty miles below Zuñi, which itself is almost fifty miles from the southern boundary line of the Navaho reservation.

The reservation itself is very extensive, and the physical conditions thereof are such that it is impossible for the Navahos to live in communities or villages. Wherever there is a spring, or a piece of land that can be irrigated, and a crop of corn, squash and melons, even oats and wheat, raised on it, a Navaho settles down. His next neighbor may live within sight or, perhaps, one, five, or ten miles away. Besides this, he may have another residence at the place where his herds of ponies and sheep are grazing, and, perhaps, still a third home among the timber, where he spends the winter with his family. Thus, the greater part of them have two, some even three residences, where they stay at different seasons of the year. From this it will easily be seen, that in taking up a census of the Navahos, some will be overlooked while many others will be counted twice. In the wooded mountain regions a census taker may pass by near a half dozen hogans, or huts, without knowing it, or he may count whole families twice, since a given place in this strange country appears entirely different when approached from a different direction, to one who is not well acquainted. This also shows how unreliable it is to make an inference or average estimations from the count of the inhabitants of one region to those of another region.

According to the census taken when the Navahos were brought back to their country from Fort Sumner, in 1868, their number

was estimated at less than 8,000, or about 7,300. However, it is a well known fact that not all the Navahos were captured during Kit Carson's invasion of their country in 1863, but that large numbers of them were still roaming at large. Another census was taken, or rather attempted, in 1869, for the purpose of distributing sheep and goats among them, which showed their number to be less than 9,000. Still another census was taken up in 1900, which gave the number of Navahos living on the Fort Defiance agency, and on what is now the Ship Rock and San Juan agency, and in the region north of the Moqui reservation, at 10,000. Herein are not included those living on the Moqui reservation, about 2,000, nor those living outside of the reservation limits, upwards of 4,000. Thus, the census of 1900 gave the number of Navahos as being more than 16,000, or 17,204. This may, perhaps, be nearer the truth than the latest Government census, and, although probably the most accurate census ever taken, is still not reliable. There is no doubt that the Navahos have steadily increased since 1868, and that at present they number from 16,000 to 18,000 souls. To say that the Navahos number about 20,000, more or less, is about as accurate as their number can be given at present.

For their social customs, religious beliefs and ceremonies, industries, etc., see the respective articles.

Words Referring to the Cosmogony and Natural Phenomena.

THE UNIVERSE.

Navaho cosmology comprises twelve worlds, or under worlds. The globe which we inhabit is slightly elliptical in shape, with a flattened base, and is wholly stationary. Moreover, it is entirely surrounded by four bodies of water flowing around it, and emptying into the west through an opening in the sky. The earth is covered with the sky which, in shape and size, is similar to that of the earth, and rests on pillars placed at the cardinal points and the center of the earth. The sky is divided into four vaults, one above the other, each of which is furnished with compartments for the various peoples inhabiting them. The entrance to these vaults is made through openings provided in the center of each vault. Beyond them, however, is space and an unknown region.

The sky is considered male, the earth female, and both are in the relation of man and wife to each other. The earth may also be considered the mother of all living, inasmuch as it produces vegetable life, and harbors many insects and animals in addition to being the abode of man.

WORDS REFERRING TO THE EARTH AND SKY.

ní, the world, the earth. ní'hodilqil, the dark world; ní'hálchí, the red world; ní'hodotlísh, the blue world—divisions of the lower worlds.

ní'hodilqil nakhi bedahunakhá, in the second vault or shelf of the dark world. Similarly, *tqágo* and *dígo* *bedahunakhá*, the third and fourth vaults.

ní'dasakhád, the earth is there, referring to its flat, slightly oval shape. *ní'hosdzán* (*náhosdzán*), the earth.

náhoké', the land in distinction to water.

ní'ninel'á, or *ní'ndanes'áji*, the borders of the earth.

bidá, the rim or edge of the world.

ní'káshbá, the limits of the earth (at water's edge).

ní'dahazlágo, to the end of the earth or land.

tqúntqél aqéhiníyí, the broad water flows around and meets.

tqo náhefí, the water flows or encircles continuously.

tqo síyín (*siyí*), the water flows quietly.

tqo ádáhilé', the water falls, waterfall.

ní'ální, or *nahasdzá* (*nahasdzá*) *ální*, the center of the earth.

nahasdzán qídes'ná, or *nahasdzá naba'ná'*, an earthquake; or *nahasdzán nahas'ná*, *nahasdzán ádesgád*, the earth trembled; *nahasdzán desdó*, the earth sounded or burst.

ní'qáogai, emergence into the eleventh world.

hájínai, moving upwards, the emergence into the present world, the place of emergence.

yá, the upper, the sky.

yádilqil, the dark upper, the firmament, sky; *yágai*, or *náhogai*, the white upper, the evening twilight, the white of dawn.

yá'ash, or *yá'ash hoká*, in the heavens beyond.

yá'nnél'á, horizon; *tqokáshbá*, water line which, with *ní'káshbá*, forms the horizon or point where sky, water and earth meet and are visible to the eye.

yá'ální, the center of the sky, the zenith.

nakhígo, *tqá*, *dígo* *yághahoká*, the second, third and fourth opening in (or vault of) the sky.

yátqát'á, the shelves or pockets of these skies.

SUN AND MOON.

Both the sun and the moon are borne across the skies by divinities. Trails, thirty-two in number, have been created for their travels, and summer and winter solstice occur as the divinities complete the total number and start their return from the northern- or southern-most trail, respectively.

The sun and the moon bearers are considered masculine.

johona'af (jí'hona'af), the sunbearer (bearer of the day), the sun.
shā, the sun (orb), sunlight.

tŕehonā'af (tŕāhunā'af), bearer of the night, the moon.

oljé, the moon.

johonā'ai, or oljé bināāstŕé', encircling moisture, rings around the sun or moon.

yāhadŕlād, sun or moonlight shining through an opening.

ādodlā, the sun or moon pierces the clouds.

biŕŕidŕlād, it (sun or moon) illumines an object.

shābikégo, sunwise, as the sun goes.

shādāji, from the sun, or from north to west, to south, to east, to north.

shāndŕn, sunlight.

shābitŕól, johonā'af bitŕól, sunrays, sunbeams.

shābitŕā'jŕlchŕ, sun halo, or basic sun-red.

shā'sedó', the sun is hot, (a hot object).

biŕnŕldó, overcome by heat. Sunstroke does not occur.

shāji sēdā, sētqŕ, sēzŕ, I sit, lie or stand in the sun, I am sunning myself.

shāji nahāstēd, I bask in the sun.

hadŕchŕ, the sun burns spots, or shābidŕlchŕ, sunburnt.

shābighā, all day (from sunrise to sunset).

shānighā, the shortest day, winter and summer solstice.

TIME.

Time is told by pointing out the position of the sun in the sky. The day begins with the dawn, and its principal parts are sun-

rise, midday and sunset, while the intermediary parts of the day, too, are expressed by positions of the sun. The day closes with sunset, or rather, with the approach of darkness, which also inaugurates the night. For the latter, however, no apparent attempt is made at a division of time beyond a mere guess at midnight, and the mention of the approach of dawn. The rise and decline of the moon does not serve as an indication of the time of night, but reference is at times made to the position of some constellations, such as the rise and setting of the morning and evening stars, the position of the Pleiades (*dilyéhe*), etc. The time at night is occasionally of importance as, for instance, in indicating the time for reciting the songs at dawn for the close of a ceremony, and the like.

The complete time circle is herewith given.

haylkhâ (*ntæ*), it is dawn.

nané'nlkhâ, or *naneinlkhâ* (*ntæ*), or *nāndzágai* (*ntæ*), it is daylight.

áltso hós'íd (*ntæ*), it is full daylight.

qa'fâ, sunrise.

sháhinâ, or *qinâ' sháhidonâ*, or *tádo sháhinâda*, shortly after sunrise (about five fingers above the horizon).

dáhádī'â, the sun is well up; *nikhédūi*, or *honidūi* (*honidōi*), it is getting warm (say between 8 and 10 a. m.)

kād ālnéé'â, close to noon (about 11 a. m.)

ālufnâ'â, midday, noon.

yaādez'â, afternoon; *yādeyâ*, or *dozhógo yādeyâ*, or *dozhógo yaādez'â*, it is declining, in the late afternoon.

qídīdescłī', toward sunset, in the evening.

qīclī', or *qīclī'hótso*, near sunset, towards evening.

hodfneskāz, it is cooling off; *hōnīkāz*, or *shádoqināda*, toward sunset (about five fingers above the horizon).

shádoqinā'da, just before sunset (two fingers above horizon).

bakhāgi as'â, or *bakhāgi ī'â'*, shortly before sunset, when sun touches horizon.

i'fâ, sunset.

i'fâ bitfâbâ, shortly after sunset.

nîhojî, darkness covers the earth, or nîhotîsh, the earth is black (blue), qîlîjî, after dusk; dozhôgo flqêl, it is pretty dark; chahôlqêl, it is dark all around, quite dark.

tféelnî, near midnight (about 11 p. m.)

tfêîlnî, midnight.

yikhaftâji, leaning towards dawn (probably the milky way is meant); or sôtso qâyâ, the morning star is risen; or kâhailkha, all three expressions meaning, just before dawn.

hayîkhâ, dawn, etc., ut supra.

Other expressions are also used, such as the following:

sôtso qavâgo, when the morning star rises; hay'îkhâgo, at dawn; shâ qayâgo, at sunrise; shâ qinâ'go, after sunrise, etc.

hôs'id, hôs'igo, at daylight; alkidâ hôs'id, it was daylight, or dawn, some time ago.

abfnago, or tãäbfnâgo, in the morning; abfnâ (tãäbfn-lî), this (very) morning; alfnâ'adâ, this (past) noon; yaâdez'âdâ, this (past) afternoon; yaâdez'âgo, this (coming) afternoon; t'fgo yaâdez'â, a little after noon; dîjî, to-day; jîdâ, to-day (this past day); jîgo, during the day, at daytime; tã jî, daytime.

tã tfê, at night; tfêgo, at night.

sôtso iyâ, the evening star has disappeared; shâ iyâ, at sunset. qaish o'âl, or qai az'â, or qaf holzhîsh? What time is it? Where is the sun? qaish yolkhâl, what time of the night is it?

Clocks and timepieces are not in use, though recently some expressions have been adapted to indicate the time of the clock.

besh dîstâ', the clock struck; dukwîdi dîstâ', what hour did it strike? dukwîro olkhîl, how many does it point? ashdlâ dahalzhîn, five black dots (five minutes); ashlâ'âla dahalzhîn, fifteen minutes; neznâ dî ôl'igo dobâ'â alnf, half-past ten, etc.

LIGHT.

The Navaho assign the various lights to the cardinal points, which are often designated in this manner.

Though openings for windows are not provided in the hogan, a fairly good light enters by way of the smoke-hole. At night the light of the fire ordinarily suffices for illuminating the interior of the hogan, as very little work is done by the light of a candle or lamp. In houses of modern construction, candles and lamps are being generally introduced.

At public exhibitions, fires are kept burning for illumination.

beădfndîn, the light (by which objects are visible).

adfdndîn, the light.

shă, or shă', the light, particularly of the sun.

hayolkhâl, first light at early dawn, twilight, which is also called hós'id.

náhodætłish, azure, the deep sky-blue at dawn or sunset.

náhotsoi, the yellow light at sunset.

chahałqél, darkness, dark light of the north.

chahałqél, it is dark, or chahałqel hé!diltłád!, it's dark, strike a light!

dishtłád, (dłftłá' dīdeshtłí), I strike, or make, a light.

SHADE.

In summer shade is obtained under rudely constructed shelters. (Compare summer houses). Parasols and umbrellas, which are purchased at the stores, are used in riding and driving. No special importance seems to be attached to one's own shadow.

chăhă'ó, the shade, a shelter, an umbrella.

bichăhă'ó, or bichăhăsh'ó, his or her shadow.

MIRAGE.

The following are presumably equivalent terms for mirage.

hădahuneyânigi, or bił hădăhuneyá, increasing or growing with it, in reference to the optical illusion witnessed occasionally

in the desert, by which trees, mountains, lakes, and the like, seem suspended in the distance, but vanish on approach.

hādāhunestqīn, the undulations of the tropical heat, the evaporating heat of midsummer.

hādāhuniyé', the mirage proper. This is personified, and accordingly color is assigned to it; hence, *hādāhuniyé' laḡaḡ*, white mirage; *hādāhuniyé' dotfsh*, blue mirage; *hādāhuniyé' litso*, yellow mirage; *hādāhuniyé' diḡḡ*, dark mirage. These are assigned to the south, the corresponding colored *hādāhunes-tqīn*, being assigned to the north.

hadahuniyé' also designates a stone similar to agate which is used ceremonially with other precious stones. Formerly this stone was a distinguishing feature of the chiefs and was attached to the hair cord.

ECLIPSES.

An eclipse is caused by the *death* of the orb, which is revived by the immortal bearers of the sun and moon.

During an eclipse of the moon the family is awakened to await its recovery. Similarly, a journey is interrupted and work ceases during an eclipse of the sun. Songs referring to the *hozhōji*, or rite of blessing, are chanted by anyone knowing them, otherwise the passing of an eclipse is awaited in silence. It is not considered auspicious to have a ceremony in progress during an eclipse of the sun or moon, and a ceremony is often deferred on this account. The rising generation, however, pays little or no attention to this custom.

johōnā'af dāāstsā, the sun is dead, eclipse of the sun.

oljē dāāstsā, the moon is dead, eclipse of the moon.

johonā'ai, or *oljē hanādsā*, the sun, moon, recovered, the eclipse is no longer visible.

PHASES OF THE MOON.

dā'neitqīn, or *dāhītqā'*, crescent, new moon.

aḡḡ beelqēl (half dark), half moon, first quarter.

hanfbās, full moon; jī' hanfbās, full moon appearing in daylight; tē hanfbās, full moon after night.

chahalqēl nādza, darkness returns, last quarter.

qāsāl, the moon is visible after dawn.

oljē beedfndīn, moonlight.

oljē behól'īn (jī' nahalīn), bright (like day) moonlight.

oljē dohozhó beedfndīda, or behol'fda, behot'fda, the moonlight is not very good.

STARS AND CONSTELLATIONS.

The creation of the stars is attributed to hashclézhīni, the Firegod, who also distributed the various constellations, giving each its peculiar name. As in other instances, so also on this occasion the coyote contrived to participate in the work of creation by robbing the Firegod of his pouch in which he carried the material for the stars. And after he had placed his own star conspicuously in the southern skies he scattered the remnants of the pouch over the entire heavens, which accounts for a multitude of stars bearing no special name. In consequence, too, the entire creation of the stars is attributed by some to the coyote.

Though there are comparatively few constellations the names of which are generally known, it is none the less well established that astrology is extensively practiced among the Navaho. The fact that the class of singers pursuing *dest'i*, "looking," or astrology, are much in demand previous to the conducting of any important ceremony, would seem to indicate as much. Hence it is reasonable to assume that a much wider knowledge of the various constellations exists than is here indicated. This knowledge, however, is in possession of some few individuals who are loath to disclose it, owing to the circumstance that astrological pursuits, which require the secret and solitude of night, are opprobriously classified with witchcraft.

The older shamans were wont to initiate their pupils gradually into the intricacies of astronomy by pointing out the new constellations to them as they appeared on the horizon. And as an

apprenticeship usually required several years, sufficient time was had to make the initiation a thorough one. This extended also to stellar influence on climatic changes, or the destinies of man, with the corresponding remedies, and the like information. Certain portions, however, of this knowledge were enveloped in some mystery, which was lifted only after the most rigid test of fidelity. Thus, for instance, words like *sâ'â naxháí*, "in old age walking," and *bike hozhó*, "on the trail of beauty" (*Mat-there*), are said to signify some important, though well known constellation, a change in which would prove disastrous to the existence of the universe. Hence this invocation, which is attached to a large number of prayers and songs, would seem to be a petition for the preservation and prolongation of age and life, while "the trail of beauty" (in the skies) indicates the proper key to their interpretation.

What may be considered an instance of stellar influence upon climatic changes is told of *í'ní*, thunder, a constellation appearing in the southern skies, and a companion of the constellation *shásh*, the bear. When *í'ní beetsós*, the feather or tip of thunder, approaches and touches the snout (*bichí*) of the bear, it is a reliable indication of the return of thunder in spring, with the renewal of life in vegetation and the animal kingdom.

As a rule each larger constellation is equipped with satellites, larger stars, which form an integral part of a given group. Thus, *atseetsósi beetsós*, the feather or tip of Orion; *shásh beetsós*, the feather of the bear. They are also provided with *bokhó*, fire or flint of the star, which ignites it, and in other instances with *bizhí*, body, *bichí*, nose, *bijá*, ears, or *bitesé*, tail, to distinguish and trace the figure. Some of these are mentioned in the following.

hastqín sakáí, feet ajar, a large, irregular square in Corvus; *hastqín sakáí beetsós*, his feather; *bizhí*, his body; *bigízh*, his staff; *bokhó*, his fire.

shásh (*só'*), the bear; *shásh bichí*, his snout; *bijá*, his ear; *bokhó*, his fire; *beetsós*, his feather.

shásh lichí, the red bear, between bear and thunder constellations.

f'ni', the thunder; i'ni bokhó, his fire; beetsós, his feather.

t'istsó, big snake, at base of bear and thunder constellations.

atséétso, the big tail. Others render it the big first one, appearing in the northern skies after ndizí, the beginning of the month; the forepart of Scorpion. The legend assigns it to the southern sky.

náhokhós bakhá'i, the revolving male, Ursa major, the Big Dipper.

náhokhós bá'ádi, the female revolving, Cassiopoea.

atséetsósi, tailfeather, or the slender first one (!); the belt and sword of Orion. etsósi, the feather, was the name given by hashchézhini, the Firegod, which coyote (atsé hashkhé, the First Angry), changed to atseetsósi (atsédi etsósi, of the First feather), with reference to himself; hence, the coyote's feather.

só hótá'i, the pinching stars, center double stars in lower branch of Hyades. These are also called baalchíni, children of dílyéhe and atseetsósi, Pleiades and Orion.

gahat'ei, rabbit track, cluster of stars under Canis major.

só' bokhó'i, large stars scattered over the heavens.

ákaisdáhi, the milky way, which is sometimes rendered yikhaf sedáhi, which awaits the dawn, owing to its approach to the east toward morning.

só' dondizídi, no-month star, called also má'i bizó', the coyote's star, or Canopus.

dílyéhe, Pleiades.

hayolkhál bēetsós, or sōtso biké' neilkhāgi, dawnfeather, or the big star followed by dawn; náhodæt'ish beetsós, the feather of the southern blue; náhotsódi beetsós, feather of the evening twilight, evening star; chahálqél beetsós, or sōtso chahálqél beetsós, feather of darkness, or the big star darkness feather.

bítsólēhi (?)

só' bíhi, the deer star; debé tsétqá, mountain sheep.

dasáni, the porcupine, Dolphin.

atséetso bigísh, the cane of the big first one, probably chief star in the group of Scorpion.

atséetsósi bokhó, the fire of Orion; beetsós, its headfeather; bitsé, its tail.

náhokhós bokhó, the north star.

náhokhós bigísh, the cane of the north star.

só', a star; só' yázhe, small stars; sótso, any star of the first magnitude; só' łni, many stars.

do bēndizídi, or dondizídi, no-month stars, which do not change their position every month. Of these there are several.

só' bíłdi, star with smoke, a comet; só' bíłdi qāyá, a comet appears.

só' náłtsíd, or ádaháłtsíd (ádáłtsíd), falling stars, meteor.

só' híłilyéd, or ilaghúli, running stars, shooting star.

só' haldé', the stars appear.

sótso qāyá, or qanádá', the morning or evening star is risen.

CLOUDS.

Navaho mythology also personifies various natural phenomena, the clouds, winds, fog or mist, rain, thunder and lightning. The abode of these divinities is in the four skies above whence they visit the earth inflicting disaster upon its inhabitants. They are usually distinguished by color, sex being attributed only to the rain. In this manner they are also invoked in prayer and song, and sacrifices and prayersticks made for each individual deity.

kós, a cloud; kós díłqł, the dark cloud; kós dotłsh, the blue cloud; kós łitso, the yellow cloud; kós łagai, the white cloud.

kós qālé', it begins to cloud, fleecy clouds.

kós dá'ndajól, the clouds are few and scattered.

kós díłkhó', it is cloudy, smooth clouds.

kós aqłdāhazná', the clouds are collected, cloudy.

kós tqá'á', the clouds are moving.

kós ishchfn (yishchfn), the shape of a cloud, a design.

MIST OR FOG.

áhi, the mist or fog; á' díqǫ, the dark mist; á' dotǫsh, the blue mist; á' hitso, the yellow mist; á' lagaf, the white, mist.

áhi bechaholqél, a heavy fog.

áhi dá'dıldö, the fog is disappearing.

datqö, the dew, dewdrops.

shö', the frost; ʔaigisi shö'ǫgai, a heavy frost (whitening everything).

sil, vapor hovering over the ground after rain, steam.

WIND AND STORM.

ńłčłł' dínš'ě', the wind people; ńłčłł' (ńłčłł', ńłtsłł'), the wind; ńłčłł' lagaf, the white wind; ńłčłł' hitso, the yellow wind; ńłčłł' dotǫsh, the blue wind; ńłčłł' díqǫ, the dark wind; ńłčłł' łłkhǫzh, the spotted winds; ńłčłł' ntłłi, the left winds; ńłčłł' shádá'ji nálaghǫli, the winds which turn on the side from the sun; ńłčłł' shábikégo nálaghǫli, the winds which turn sunwise; ńłčłł' nodózi, the striped winds.

ńłyöl, the wind, strong wind; ńłčłł, a breeze; déyöl, it is blowing; ńłyöl qǫyá, the wind is up, it is blowing; nádziyöldłsi, small whirlwind; nádziyöldłsitso, whirlwind.

qaiyéesöl, a storm or wind which drives up a rain.

łesh hásál, a sandstorm (blowing sand in every direction).

łesh nádöz, a whirling blizzard, sandstorm.

łesh bíł qǫyöl, sandstorm, wind which stirs the sand.

łesh beǫłłé, sand with night, or łesh bechaholqél, sand with darkness, sandstorm darkening the sky.

yóöqöłzhód, the storm is passed, it cleared up.

shádłčłł', I take some fresh air; yǫłčłł', let some fresh air in!

RAIN AND RAINBOW.

The rainbow is frequently represented in colored sand paintings and ceremonial paraphernalia, and on the shield. The "trails" of the divinities are usually represented as made of various kinds of rainbow.

nłtsá (*nłtsá'*), the rain.

nłtsá'bakhá', the he-rain, rain accompanied by thunder and lightning; *nłtsábá'ád*, the she-rain, a light, mild rain.

nłtsá'tłól, rainray; *nłtsánajín*, the dark streaked rain (and clouds). These are now represented by horsehair in the decoration of the masks.

natsłlíd, the rainbow; *natsłlíd agúdi*, the short rainbow; *natsłlíd iyłshi*, a curved rainbow.

náhaltqín, it rains; *nahóltqá*, it rained; *nahodóltqł*, it will rain; *ná'dízhól*, a steady, fine rain; *do dłłtqł*, a general rain.

nıkhfdadıtsf', it sprinkles; *shıkhfdestsá'*, raindrops.

SNOW AND ICE.

In earlier days children were bathed in the snow to harden them to the weather and exposure, a custom which is now disappearing. Snow is melted over the fire and used for cooking purposes. Snow shoes are not in vogue at present, though overshoes, or covers made of burlap and sheepskin, as also foreign overshoes, are now often designated as snow shoes. In the early days, however, a roughly shaped shoe of wood was attached to the foot for walking upon deep snow. A piece of pine or cottonwood, and even dried bark, was slightly pointed at both ends and secured to the foot by means of cords. As some difficulty was experienced in regaining one's balance in case of a fall, a knife was indispensable, so that, in case of an accident, the cords might be severed and readjusted. In consequence, the loss of a knife in deep snow was looked upon as fatal, and accounts for the wish expressed by parents in earlier days "that their children may not lose their knife." At present little or no use is had for these wooden or snow shoes.

yás, *zás*, snow; *nchłl*, *yıdzás*, it snows; *nádishchıl* (*n'tæ*), it snows again; *chıl bechaholqét*, or *chıl beetłé*, heavy snow storm which darkens the sky; *chıl háśál*, snow storm blowing the snow in every direction; *chıl nádöz*, a blizzard; *chıl bıłqáyól*, drifting

snowstorm, penetrating every crevice; yísál, a snowflurry.

yasftso, a big snow; yás łabái, light snow which disappears after sunshine; yás ditlé, wet snow; yás yłtsai, dry snow; yás díchízhi, rough (top-frozen) snow; yáskhá níkhēs, snowcrust, crisp, shrieking snow; yáskháāztqá, a firm snowcrust; alúkhā, a slippery snowcrust; yíbá', a snow only in spots.

yás bíná'ákhe, footprints in the snow.

yás bíná'átqín, tracks or a path in the snow.

ná'osdlid, the snow melts; tsıl ná'osdlid, it melts rapidly.

yasfkhe, snow shoes; tsíkhé, or tsínkhé, the wooden shoe, or yásgo khé, the snow shoe; alúkhā síkhé, they (the shoes) support one on the snow; do bí'íkhā, or baghanákhā, one did not break through with them; tsín dāāzłfigi, any kind of wood; akhásht'ōsh, bark; sagáni bahásht'ōsh, dried bark.

tqín, the ice.

tqín díłqł, the dark ice; tqín dotłish, the blue ice.

tqín litso, the yellow ice; tqín łagai, the white ice.

tqín al tqās'al, variegated ice, called also tqín líkhfzh, the spotted ice, all of which are purely legendary.

tqín deilkhó', tqín deiltqó', smooth, slippery ice.

tqín bijē qadayá, ice whose heart bulges out, bulging ice.

tqín aqidídlád, rent ice.

tqín aqidítqál, cracked ice, the ice is cracked.

tqúistqín (yistqín), frozen water; tqín dá'nestśé, icicles.

nlói (níłói), hail.

shinitqín, I am freezing; sístqín, I am frozen; shideshtqínł, I will freeze; bńitqín, it is freezing; yistqín, frozen; dotqínł, it will freeze; nitqín (hastqín, hodotqínł), it is frozen (the ground, animals, trees, etc.); yishtqín (deshtqínł), I freeze an object, for instance, lice.

nahalyf' (naholyf', náhodolyf'), it thaws.

nalyf' (nālyf', nádolyf'), I thaw out.

nádeshyf' (nadishyf', nádideshyf'), I thaw out at the fire.

nashyf' (na'ilqf, ndeshqf), I thaw it out (a blanket or clothes).

WATER.

Water is used for drinking and cooking purposes. Clear water taken from a running stream, or from a pool of rain water, is always preferred. Snow, too, is often melted to obtain good drinking water. Along river and arroyo beds the underground stream is allowed to collect in small holes dug for this purpose in midsummer. When conditions are otherwise favorable to advantageous location, water is drawn from pools and water holes, which ordinarily would not be considered. Cisterns and wells for collecting water are not made, and the hogan is generally built some distance from the water supply to insure its purity.

The custom of washing one's self in the morning is of very recent introduction, and by no means a general one. Lice and vermin, however, have ever been a source of irritation, which necessitates a relief found in the yucca bath, with which the hair is scoured from time to time. Ceremonial baths and waters are referred to elsewhere.

Canoeing is not in vogue. Along the rivers of the country flat boats are used to ferry the stream at high water tide. These are drawn up stream and then allowed to drift with the current and steered diagonally across it. On the return the same process is repeated. Fording is done in a similar manner by selecting a shallow spot in the riverbed and taking a course up, or against, the stream. In high water the rider often removes the bridle and drives his animal into the stream. He then plunges after it, and by holding to the tail of the horse is drawn across in safety. The Navaho in general are inexperienced swimmers and usually steer clear of water.

Though the Navaho ordinarily is very particular with regard to his personal drinking supply, and despises alkaline, filthy and stagnant water, his stock until recently was ill provided for. When possible, sheep and goats are now kept from bodies of water used for watering horses and cattle, and time and labor is also expended upon throwing up earthwork and dams in localities suitable for reservoirs for watering stock.

tqô, water, a river, stream.

tqô nlf', running water, a spring; tqô qālī, water flows out, a spring; tqô nltqôli, or tqô nltšīn, clear, crystal water.

tqô nlf (nlfīn) dītšā', the rush of water is heard.

tqônil itšā', the dripping of water (water-drops) is heard.

tqô siyfn (siyf), a pool, lake of water.

tqūntqēl (tqô ntqēl), the ocean.

tqahôttqēl, the water widens out, the mouth of a stream.

tqô nānesdizi, the waters are tangled, spread over the whole area; tqô bīshghān, the back of water, a wave.

tqô bīshghā dānlghūsh, the waves splash and foam.

tqô bīshghā nādādīdā', the waves break.

dā'nānlāghāsh, it bubbles (boiling water).

dā'nānshqāsh (dā'nānēlqāsh, dā'ndfneshtqāsh), I boil water, make it bubble.

tqālawhūsh qaznsé', I'll stir soap; tqālawhūsh qansé' (hanúsā, qadīnesél), I raise foam, stir a lather.

qāhodībīn (qahodēbīd, qāhodīdībīl), it (a spring or water hole) is clogged; tqô bidādestīn, a dam or water bank.

tqô bidādīnshtīn (bidādēhtīn, bidādīdeshtīl), I dam the water.

dādīnshtīn (dādiūtīn, dādīdeshtīl), or dāndīnshtīn (dāndīnīl), I dam the water, put in a dam.

dadégīsh, the dam is broken; tqôkīishjé, a crate extending over the water for watering stock.

DRAWING AND CARRYING WATER OR LIQUIDS.

tqô qahashlē (qahālō', qahideshlō), I draw water with a rope.

tqô hashkhā (hākhā, hadeshkhāl), I draw or dip water (with a vessel); tqô yishkhā (tqô nākhā, tqô deshkhāl), I carry water, or more frequently, tqô nashkhāl (nnākhā, tqô ndeshkhāl), I carry water again.

qādīshbīn (qadēlībīn, qādīdeshbīl), I fill a vessel.

ya'ishkhā (ya'fkhā, ya'ideshkhāl), I empty it.

yash'ā (yā'ā, yeidesh'āl), I spill or pour water on something.

khô tqôbīl yash'ā, I extinguish a fire by water, or khû tqôbīl

náneshqāzh (nanélqāzh, nadinéshqūsh), I flood a fire with water.

yasẓid (yéizid, yeidéšil), I pour it out, or turn a vessel over on its side.

nasēs (nasēsās, nidesās), I sprinkle water (or sand) with sprinkler.

DRINKING AND WATERING STOCK.

ashdlā (eshdlā, adeshdlil), I drink water.

nā'nszid (nañzid, nádesil), I give you a drink, I pour out for you; **shā'nzid**, pour out for me, give me a drink!

tqayislós (tqayflós, tqádeslós), I water a horse, lead him to water; **tqayish'esh** (tqayf'ēzh, tqādesht'ish), I water a couple of horses or more.

tqá'nshkhād (tqanékhd, tqādīneshkhāl), I drive a few horses to water, or I herd them to water.

tq'a'nsōd (tqanfyōd, tqadīnesōl), I herd many to water.

WASHING AND BATHING.

tqáisgis (tqāségis, tqáidesgis), I wash or bathe it, I wash myself; **tqánisgis** (tq'a'nségis, tq'a'ndesgis), I wash you.

tqádišgis (tqadéšgis, tqádīdesgis), I wash or bathe.

shinf tqanásgis (tqanaségis, tqándīdesgis), I wash my face; **letsā tqanásgis**, dishes; **æ tqanásgis**, I wash clothes.

tqahásgis (tqahoségis, tqáhodesgis), I scrub it.

tqó sēdō' **betqādisht'ōd** (betqādf'ōd, betqādīdesht'ōl), I remove it with hot water, such as hair from a hide, etc.

DIPPING AND THROWING INTO WATER.

tqō benash'ā (besā'ā, bēdesht'āl), I dip a hat into water.

tqo benáshji (beshéjā', tqó bēdeshtji), I sprinkle grain with water.

tqo bēnashlé (besélā, bēdeshtlél), I put a rope or piece of leather into water, I soak it.

tqo benashtqi (besétqā, bedeshtqil), I dip a stick or shovel into the water.

tqo benastōs (besēltsōs, tqó bēdestōs), I soak a blanket.

tqóbil nashá (*bil nashá*, *bil nasháál*), I water plants, or fill a person with water.

tqáyishá (*tqayfá*, *tqadesháál*), I soak my wagon, or I throw my hat into the water.

tqayishjá (*tqayfjá*, *tqadeshjál*), I throw grain into the water.

tqayishlé (*tqayflá*, *tqadeshléál*), I put leather or rope in water.

tqayistsós (*tqayfltsós*, *tqadestsós*), I throw a blanket or hide into the water.

tqayishtqf (*tqayftqá*, *tqadeshtqfál*), I throw a stick into the water.

tqayishníl (*tqayfnil*, *tqadeshníl*), I throw several objects into the water.

tqáyishqán, or *tqáqishqán* (*tqayflqán*, *tqayideshqál*), I throw anything into the water.

tqayishtfáh (*tqayftfáh*, *tqadeshtfáh*), I fall into the water.

tqayishgyé (*tqayfgó*, *tqadeshgó*), I drop into the water.

tqaktáyistsós (*tqaktáyfltsós*, *tqaktádestsós*), I drop a blanket into the water.

tqaktáqishqán (*tqaktáqflqán*, *tqaktáhideshqál*), I throw anything into the water.

tqaktáyiltsíd (*tqaktáyéltsíid*, *tqaktáidoltsíd*), it drops into the water, as, for instance, a stone.

Other terms are used ceremonially:

tqaktáyishníl (*yfníl*, *tqaktádeshníl*), I drop several things into water or *tqaktáyishné* (*yfné*, *deshníl*), I throw or drop them, into water, or *tqaktáyishléál* (*yfhléál*, *tqaktádeshléál*), or *tqaktáyishlé* (*yflé*, *deshléál*), I drop an animal into water.

FLOATING AND WADING.

nash'él (*nasé'él*, *ndesh'ól*), I ride in a boat.

yish'ól (*f'él*, *ádesah'ól*), I drown.

dish'él (*dé'él*, *desh'ól*), I ride a boat.

náash'él, or *nash'él* (*nasé'él*, *nádesah'ól*), I row or ride in a boat.

naáshkhó (*naséikhó*, *nádeskhóál*), I swim.

tqayishá (tqānséyā, tqadeshál), I go into the water, I ford a stream.

tqáyí'nashá (tqáyí'naséyā, tqáyí'ndeshál), I wade in the water.
tsé'ná'yishál (tsé'ná'nyā, tsé'ná'deshál), I ford, cross a stream.

MODERN.

nfyól tqóqayilé', the wind draws the water, a windmill.

WEATHER AND TEMPERATURE.

Air and atmosphere are not distinguished from, but designated by, the wind. The condition of the weather is ordinarily indicated by the description of a storm, or by simple qualification, such as cold or warm, pleasant or disagreeable weather. The temperature of water is described in a similar manner.

ńlčłí', the air, atmosphere; ńčłí' a breeze.

desdúi, it is warm; deskāz, it is cold; nestígo deskāz, it is chilly; nestígo desdúi, it is quite warm; (nestígo, hidden).

nahóltqá, it ceased raining, it has rained.

dobahadzidigíłtėgo nfyól, a terrific wind or sand storm; similarly, dobahádzidigíłtėgo hashtísh, or do-sohodobėzhda hashtísh, a very heavy road, a muddy road.

yóóqółzhód, it has cleared off, clear weather.

dńłkās (deskāz, dólkās), it is cold.

ńldúi (desdúi, dólđo'), it is warm.

shńłđł (sisđł, shđłnodłł), I am cold.

honesgaf or honígaf (ńťś), it (the sun) is hot, warm.

čłőhonagá (čłőhunnágai, čłőhodńnogá'), it is warm.

čłėłđó' (čłńłđđúi, čłłđđłđó'), the sun is hot.

nfyółtso, a windstorm, it is windy.

tqóбіł nčłł, or tqóбіł deizhčłł, rain and snow, a wet snow.

yishđłł (ńťś), I am chilled.

qáyól (qáyól, qáđoyól), the wind is up; đíyól (đéyól, doyól), it is blowing; đlčłí' (deschłí', dochłí'), there is a breeze; or íyól, (fyól, doyól), there is a wind, and ńčłí' (fčłí', áđochłí'), there is

a light breeze; *nfyöl* (*nté*), it blows.

lēsh hátsqās (*nté*), the dust is stirred (by a herd); or *lēsh dá'ojól* (*nté*), a volume of dust rising; or *lēsh dá'ogó'* (*nté*), the air is thick with dust, a rain of dust; or *lēsh yánilzhē'* (*nté*), a drizzling, "fringed" dust; *lēsdzōsf'*, or *lēshjosf'* (*lēsh adzísf'*, *lēš ázdosf'*), dust left in their track, or *lēsh ojól* (*i'fjól*, *idojól*), a rolling line of dust; *lēsh ogó'* (*i'fgó'*, *idogó'*), a gradually falling line of dust.

tá'kös, or *tá'askös*, it is cloudy; *kös dá'ojól*, a line of scattered clouds; *kös dá'sltsös*, a line of fleecy clouds, or *kös dá'ogó'* (*nté*), a falling or drooping cloud; *kös dasákhād*, hanging cloud; *kös bechahalqél*, or *betlé*, dark, heavy clouds.

áhi dá'ojól (*nté*), scattered mist, it is foggy. Similarly, *áhi dá'sltsös* (*nté*), strung out over a valley; *áhi dá'ogó'*, falling mist, drizzling; *áhi dahikhál*, enveloping fog; *áhi bechahalqél*, or *betlé*, dense fog.

nłtsá' dá'ojól (*nté*), it is raining in spots, or *nłtsá' dá'ogó'* (*nté*), rain is falling (along a distant line); *nłtsá' betlé*, or *bechahalqél*, a heavy rain clouding the atmosphere.

nłtsá' ojól (*i'fjól*, *idojól*), and *nłtsá' ogó'* (*i'fgó'*, *idogó'*), rain along the entire horizon.

Similarly, *yās dá'ojól* and *dá'ogó'* (*nté*), snow drifted by the wind, drift snow, and *yas ojól* and *ogó'*, etc., snow drifting in all directions.

chıl dá'gó' and *dá'ojól* (*nté*), snow is falling, it is snowing here and there; *chıl ojól* and *ogó'*, it snows everywhere.

chıldá'ji, facing the snowstorm; *binashdá'ji*, or *nıyöldá'ji*, facing the wind (Cf. also snow, wind and storm).

hadó', the heat; *hakáz*, the cold (weather).

honesdó', it is (intolerably) hot.

(*nłchır'*) *yāhóřé'*, the weather is fine.

náhuntlá', the weather is bad.

yisdá' qúyē', it is close inside. (Cf. fresh air, under storm).

naháshö, it is damp.

hasgán, it is dry, there is a drouth.

tqó sēdō', warm, hot water; tqó sākāz, cold water; tqó sīzli, or tqo altsisigo sēdō', lukewarm water (Cf. ice).

DIRECTION AND DIRECTIONAL ASSIGNMENT.

The Navaho recognize the following directions:

East, qa'á'.

South, shada'á'.

West, æ'æ'á'.

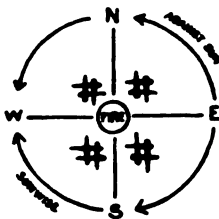
North, nāhokhōs.

Middle, alnf; ya alnfgi, the center of the sky, the zenith.
nī alnf, the center of the earth.

Upper, dēgo or wódā'.

Lower, or down, yāgo or yūyadi; biná'shi or ayái des'āigi,
are probably equivalents for the nadir.

The order here mentioned is followed in most ceremonial functions, the preference being given to the east. Thus, the heads of sand paintings always point eastward, and the patient is seated upon them facing the same direction. Numerous other instances enjoin the same order of sequence, as in entering and leaving the ceremonial hogan, in preparing the wreaths for unravelling, in marking and tracing lines with pollen, or administering the latter, all of which is begun at the east end, thence to the south, to west and north, completing the circle at the



point in the east. This course is called shābikēgo, sunwise, or with the sun, while, when reversed, or beginning at a point in the north, thence to the west, south, east and north again, the order is called shadā'-ji, towards or facing the sun.

Frequently, too, direction is indicated by color. Thus, the dawn is assigned to, and indicates, the east, the skyblue the south, the evening twilight the west, and darkness the north. Hence, the symbolic color of the east is white, that of the south blue, of the west yellow, of the north dark or black. In conse-

quence sand paintings, for instance, of the sacred mountains are decorated in these colors, *sísnajíni* (Pelado Peak), white, *tsódzíl* (Mt. Taylor), blue, *dóókoshíd* (San Francisco Mountains), yellow, *debéntsa* (San Juan Mountains), black. Sacrificial stones, too, are assigned according to the color of the direction: white shell (*yolgai*), to the east, turquoise (*dotłízhí*), to the south, abalone (*díchfí*), to the west, cannelcoal (*báshzhíni*), to the north, red-white stone (*tselchí*), to the center.

The legends make early mention of directional assignment. Thus, previous to the creation of the sun and moon, the light arose in columns of white in the east and of yellow in the west, for the day, while similar columns of blue in the south and black in the north, indicated the return of night. The direction was indicated by the course of these columns of light, and the turn from right to left, and vice versa, which now indicates the course with and from the sun respectively, originally indicated the turn with or against the light (*shábi kégo*, *shadá'ji*).

In accordance with the general ritual preference for the east, which is also manifested in the prototype of the hogan, the exit, or doorway, of the Navaho hogan is always placed in the east, which is even observed in some modern structures. Possibly, too, this is done to facilitate the observance of the numerous rubrics with reference to direction. Similarly, the opening of the corral for public exhibitions is placed on the east side, while that of the sudatory is optional, some preferring the west to the east side, though usually the heated stones are placed on the north interior of the hut.

Intermediary points of the compass are ordinarily not specified, but are indicated in general terms, such as eastward for southeast, and so on. The direction to or from a point is generally indicated by adverbial particles attached to the name of a place, as *má'itqódsé*, from Houck's Tank, *yó tqógo*, to Santa Fé, *áyakhInji*, towards Moqui, etc. Indefinite expressions, as, I am going north, coming from the south, are not generally used.

Words referring to direction.

qā'āji, eastward; shadā'āji, southward; šə'ə'āji, westward; nābokhosji, northward; or to the east, in the east, in an easterly direction, etc.

nītsji, before, ahead of me.

shikhédə, behind me; nikhéshdə, behind.

shālkis, aside of me; bālkisgi, aside of him; yālkis, aside of it.

shināgi, around me; shikīdə, above me; shiyādə, below or under me; sits'āji, away from me.

dā'ji, against, facing, as chīldā'ji, facing the snow. Against may be expressed in other ways: bīstqāl, it (a stone) struck against the wall; bīnistsə, I brace, place against it.

bikégi, or biké, after, behind it.

bīghā'gi, alongside of, as yīghā'gi yīlaghūl, he runs along it (for instance, a fence).

atqā', between, amid, as diné bitqā', among the people.

biy', within, inside, among, as diné biy', among a crowd.

gúnə', in here, inside; tīōdi, or tīōgi, in the open, outside.

tīōgo, towards the open.

biyīdi, the interior; bakhāi, the exterior or uppermost.

shināl (nīə), in my presence, I attend.

qonāndi, or wunānji, beyond.

binēdi, in the rear of it.

bitsénāgha (bizénaghadi), around its point.

bitsji, at its base, near it.

nīzād, far away.

da aqāni, or da aqānji, it is near by.

tayīdi, tayīdiji, close, near by.

kwé'ə, or da kwé'ə, here; da khodó, or khodó, right here, here.

āji, over there; ādi lān, there.

qāji, qajīshā', or qādi, qādishā', where, whither?

qādə, from which direction?

qādə nī', or qādə lānī', whence do you come?

qāgolā or qagóshā', or qāgosh dinīyā, whither are you going?

khujf, here, this way.

yushdæ, or khushdæ, this way, towards me.

nlá'ji, or nlá'di, yonder; nlédi, or nlēyæ, yonder, some distance.

bilá'di, on the other side of it; yúwodi, beyond it.

baghádi, on top of it; baghágo, up above.

dégo, upwards; yágo, downward, below.

THE CALENDAR.

The year is primarily divided into two seasons, winter and summer. The intermediary seasons, spring and autumn, are referred to in conversation.

náqai, the year, literally another winter, since the year begins with winter.

qai, winter, or qaigo, in winter.

shf, summer, or shfgo, in summer.

dā, or dāgo, in spring; aakhād, aakhādgo, in autumn.

nāqaidā, or naqaiyædā, last year, but qaidā, last winter; shīdā, last summer; qaiji, winter-, shfji, summer- (denoting assignment, such as winter- and summer-chants or animals).

dāji, towards spring.

naaqā, it is winter again; naashī, summer is here again; or, anāniqāgo, when winter returns; anānishfgo, when summer returns; dā naházli, spring returned again.

The year is divided into twelve months, a division attributed to the coyote, who questioned the wisdom of assigning twelve months each to the earth and sky. Upon this suggestion the Creators then assigned six months to the sky for winter, and six to the earth for summer. The coyote, moreover, ordained that contentions should arise over the exact period of the first month, which they called:

ghāji, "back to back," namely, when the white of winter and yellow of summer meet, turning their backs to each other, the one to proceed, the other to retrace its steps. The month of October, with which the winter months and the year begin.

nłtsi'ts6si, or **nłchłi'ts6si**, the light or slender wind, November.

nłtsł'ts6 (**nłchłi'ts6**), much or big wind, December.

yłs nłtēs, probably melting snow, January.

atsł biyłzh, "eaglets," February.

w6zhchłfd, March, the meaning of which is obscure.

The following are the summer months (**shłji**):

dłchłł, short corn, April.

dłtso, tall corn, May. Various versions are given of the meaning and pronunciation of the last two words. Some render **tłchłł** and **tłtso**, tiny and tall leaves (**biťł**), others **tł'chłł** and **tł'tso**, small and large feathers (**biťł'**, feather) of eagles.

ył'ishłshchłłi, "I insert the small grains," this month being designated by some as the month for planting, June.

nłeshłstso, "the big sugar cane," July.

błnłntłts6si, light ripening, August.

błnłntłtso, the great ripe, or harvest, September.

The month begins with every new moon, and frequent differences of opinion as to the proper month prevail. The calendar is set aright as the season progresses, comparisons often being made with the American mode of reckoning. No specific number of days is assigned to the year or month, and the days of the week are not designated by a special name. A man's age is reckoned according to the winters he has lived (**nłqai**, an additional winter), the number being added. In tracing their age some event is mentioned and the number of years before or thereafter is given. Thus, two or more years before or after the return of the Navahos from Fort Sumner, etc. Few resort to placing a mark each year on some secluded rock, though this, too, is done.

In modern times the Sunday has been recognized as a fixed date and calculations are made accordingly, so and so many Sundays hence, two days from and after Sunday, etc.

dł'neitqłhi, new moon.

náhidizídi, the month (is filled or over). The preceding word inaugurates, the latter completes the month.

damígo (Sp.), Sunday; damígo biskhá, Sunday's tomorrow, Monday; nakhiskhágo damígo, in two days Sunday (Friday); damígo nabiskhánsədə, last Tuesday; nakhiskhágo damigo (damou) yədə, last Friday; tsəbí iskhágo, in eight days; tqā iskhágo damígo, Sunday occurs in three days.

nāāqalgo, in a year (from now); naqaidā, last year (at this time); nakhi naqaidā, two years ago; dīsdīn naqaiyədə, forty years ago; tqādīn shí shīnāqai, I am thirty years old, etc.

iskhágo, tomorrow; nakhiskhágo, two days hence.

nakhiskhāndā, two days ago; iskhāndā, yesterday.

There are no such expressions as next or last week, the number of days always being mentioned. Though the months are designated by special names, one does not use such expressions as last April or next March, etc.

nihidīgái, it is whitened (blooming).

đdahotso, it is yellow (autumn).

nihiditsīn, it (the fruit) has wood, it is ripe.

khōhotədə, last summer or winter at this time.

khunāhodzai, next summer or winter at this time.

ostésēhīdā, or nāōstsē shīdā, two summers ago.

ostésēqaidā, or nāōstsē qaidā (nāōstsēqaidā), two winters ago.

ťokhūnaghāndiji, just a while, for some time.

LIGHTNING AND THUNDER.

Lightning and thunder are often referred to promiscuously.

ātsīnlťīsh, the lightning, zigzag lightning.

hātsōlaghāl (atsōlaghāl), sheet lightning.

hājilgīsh, flash lightning (in summer).

bó'ōs'ní', struck by lightning.

tsīn bó'ōs'ní', plants growing in the vicinity of a tree, or anything struck by lightning.

f'ní', the thunder.

f'nī dīkqī, the dark thunder; f'nī' dotfīsh, the blue thunder;
f'nī' līso, the yellow thunder; f'nī' lāgaf, the white thunder;
f'nī' nodōzi, the striped thunder; f'nī' ntīāi, the left thunder;
f'nī' hīkhīzhi, the spotted thunder.

adī'nf' (adēs'nī', adīdo'nī), it thunders.

adīdīfī, a peal of thunder.

qō'ōs'nī' qūisqī, or f'nī' qūisqī, he was killed by lightning.

ūjīlgīsh qādahachī, the lightning flashes at night.

atsīntfīsh āndahatqā', the lightning strikes or descends into
the ground.

tāīn bīlādolchīl, the lightning struck a tree.

lādolchīl, the lightning strikes somewhere.

ādolchīl, or lēndfīchīl, a rolling thunder.

THE LAND.

nāhokē', the land.

lēsh, the ground, dust, dirt.

lēsh nādadīgō', or qayā, a cloud of dust raised by the wind.

lēhogyēd, a pit, cellar; qāhogyēd, a dugout, posthole.

ā'ān, a burrow; nāhodītēō', a bog.

hashtfīsh, mud; hashtfīsh hōdījē, the mud clings.

hashtfīsh dītēfdigi, sticky mud.

lēnshtā (lēneshtā, lēdfineshtā), I prostrate myself, I lie prone
on the ground.

lēyish'ā, I put (money) into the ground, bury it; lēyishjā, I
bury corn; lēyistsōs, I bury a blanket; lēyish'ēsh, I bury two
horses; lēyishlē, I bury leather; lēyishtqē, I bury an animal or
person; lēyishnī, several objects; lēyishtqī, a gun or stick;
lēyislōs, I bury a horse.

MOUNTAIN AND VALLEY.

dzīl, a mountain, which at times occurs as dzīl, as in yolgaf-
dzīl, the white shell mountain.

dā'iskīd, a hill; dādaskīd, bluffs.

dzilgizh, a mountain pass.

dzilghá, *dzilbaghádi*, or simply *baghádi*, the top or summit, on the summit of a mountain, on the mountain.

dzil látqá, or *dzil bilátqá*, the summit, or highest point of the mountain; *dzilnítá*, the side of a mountain; *dziltád*, the base of a mountain; *dzilbádi*, or *dzil bináni* (*binánidi*), *dzil ałfi*, on the slope or grade of a mountain.

dziltqátá, *dzilbitqátá*, in a pocket of a mountain, a shelf on the side of mountain; *dziltá'*, or *nástá'*, a rincon or recess of a mountain or cañon.

dezá', a promontory, point of mountain.

dzil biné', or simply *binédi*, behind the mountain, on the rear side of a mountain.

dzil bitsíndi (*bitsídi*), at the base of mountain, at its foot.

dzilgo, to the mountains; *dzil bicłf'*, in the direction of the mountains; *dzilyf'*, *dzil biyf'*, in the mountains; *adłkhá*, a dark nook in the mountain; *dłkhá biyf'*, in the mountain nook.

tqe, the valley; *tqégi*, in the valley; *tqe gúyá*, down the valley.

STONE.

Early Navaho implements were usually made of stone or wood, as iron and its value were little known. Accordingly, stone knives were used for cutting, whittling and scraping, while the name applied to the modern wood axe is suggestive of an earlier axe of stone. Stone knives, in shape like the arrowpoint, or elliptical, are still largely prescribed for ceremonial purposes, in cutting sacred buckskin, in unravelling knots, and the like. Yet the word *besh* (stone knife) is now generally applied to iron and metal, or anything made of it, unless from the connection a stone implement may be designated, such as *nayenezgháni bibésh*, the (stone) knife of the Slayer of enemies; *bésdológhás*, the serrate (stone) arrowpoint, etc.

Rare stones are employed as ornamental assets, and as sacrificial offerings in some rites.

Stone is not used as building material, except in modern structures, and in building dams or walls. Stones are heated preparatory to entering the sudatory.

A stone gristmill for grinding corn, coffee or wheat, is still in use by some. Presumably, the gristmill is a survival of early intercourse with the Pueblo. Indeed, some legends, in speaking of that period, introduce the women as occupied, side by side, in grinding corn on a metate, much as may be witnessed in any Pueblo to-day, and as being accompanied by a drummer, or flute player, timing them. At present the Navaho women do not do this in common as then, neither is the gristmill a stationary household fixture, as with the Pueblo. But when occasion requires, a large and convenient flat stone is sought in addition to one of smaller size and fairly rounded, which will easily roll over the larger stone, and the grains are crushed between them. The stones are then put aside or discarded, especially as flour and coffeemills may be purchased at a small cost. Petrified wood was sometimes used in sharpening the upper millstone by indenting its wornout surface; otherwise, little use is had for it.

The griddle still in use for baking meat and cakes, is a flat, round stone, which is placed over the fire and heated.

Various other references to stone will be found in the course of the several articles.

tsé', a stone or rock; besh, a stone knife.

tséaghósi, flint rock; chézhini, malpais rock, lava.

tséawózi, a pebble; tsezaf, gravel; saí, sand.

tsétso, or tsétsotqá', boulder, river boulders.

tsé dokózh, (salt rock), almogen (impure alum).

tsékhô', native ochre; tséjé, (rock pitch), amber.

tsénastqá (tsenastqáni), petrified wood, sometimes called yeitso bitšín, bones of yeitso.

tsé'ndās, (heavy stone), iron bearing stone, quartzite.

tséní'ái, coal croppings; tsé' dotłizhi, perodots.

tsághadindini, transparent stone, rock crystal.

tsé lichí, rubies, garnets; tsélichí', red-white stone.

dotl'zhi, turquoise; tsésó', (rock star), white stone, glass.

tsé' dinsé, the growing stone; tsé' dildóí, (the exploding stone), limestone; tsé'dfild, burnt limestone; tsédadilfdigi, lime.

tsétsági, stone croppings, mica, isinglass; tsé' bijékhál, a stone rosin; natéflid bichá, (mythical), stone rosin.

tsé' qaha'nfligi, a modern quarry; tsé' qashash'níl (qaháníl, tsé' qahideshníl), I quarry stone.

tsé' nálághúli, or tsé' beékháshi, modern grindstone.

CAÑONS.

bokhó', or tsékhó', a cañon, rock cañon, gorge.

cháshkë, an arroyo, a gulch.

tsékhó bidági, the edge or rim of a cañon.

tsáyí', or bokhó' gúné', in a cañon; tsékhó' biyí', in a cañon.

tsékhó' chílnlfnigi, where the cañon flows out, mouth of a cañon; bíhilí', or tsé'ilí' (tséhilí'), or tsékhó' ilí', where it flows into the cañon, the head of a cañon.

tsétqá', (between rocks), in or at the head or mouth of a cañon.

tséní', pocket of a cañon, a bench of a cañon with ruins.

tsétqátá', a ledge or covered shelf of a cañon.

tsé'án, a cave; tséédzís, a cavity in the rocks, rock tanks.

tséhachí, a cliff; tsétlá', a pocket or enclosure of a cañon.

tsékís, a crevice in the rock.

tsé' isdó', the rock is burst, a crack in the rock.

tsé' istqál (yistqál), a crevice or crack in a rock.

tsé' isdlád (yishdlád), the rock is rent asunder, rock fissure.

tsébihoditsá, a noise in the rocks, or tsébihodídlád, the echo.

MINERALS.

The Navaho do not mine. Brass for buttons was obtained from the Utes, and copper for bracelets and ornaments from the Mexicans and traders. Silver has superceded copper long since, and is purchased in Mexican coin from the traders.

óla (Sp.), gold.
 besh lítso, brass.
 besh lichf, copper.
 bëshlagai, silver.
 besh dotłish, iron.
 chf dotłish, specular iron ore (hematite); tse ndäs, iron ore.
 łé tiyIn, oil croppings, indications of oil; ákăkhû, oil (modern).
 łéjin, coal, which is not used as fuel. The same is true of
 łéjin bitësh, coke.

CLAY.

Various kinds of clay are used by the Navaho ceremonially and otherwise.

dlësh, white clay, is used as spice with foods, or in painting the masks. The fire dancers paint their bodies with it on the night of the performance.

tqăłłłhată', a clay gathered from a waterbed.

bis, adobe; bis lichf, bricks, both of which are not used as building material.

bis dotłish, blue clay or adobe.

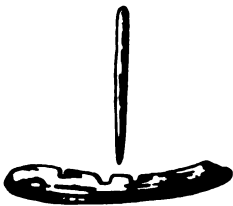
deschf, red clay (reddle?); lětsoi, yellow ochre, brimstone.

lěsh lězhłni, dark, black clay or ochre.

khû dídłłsh, a yellow clay used as an incense.

tqănl', alkali, alkaline earth. This is also expressed by lěyă self, it turned alkaline.

FIRE.



Aboriginally fire was produced by means of a drill consisting of a whirl of hardwood, and a tinderbox of pine or cottonwood. This box was a stick about an inch wide and thick, and about eight inches in length. Small holes, sometimes four in number, were cut into it, so that the friction caused by

spinning the whirl between the hands ignited the fibres in the cavities, which were then set ablaze by blowing upon it. The fire drill is now in use only at certain rites.

Subsequently steel and flint superceded the drill, and in turn were entirely displaced by matches, purchasable anywhere. These are carried in the pocket, or occasionally in the leather shoulder pouch. At home and at social gatherings the embers are raked from the fireplace and held between the fingers, or placed before the smoker in lighting a cigarette.

Ordinarily cedarwood is preferred for cooking in the open fireplace of the hogan, though for heating and illuminating purposes pine and piñon are substituted. Cottonwood, owing to its painful smoke, and hardwoods generally, are used only when other kinds are beyond convenient reach. Coal is not mined as it is not in demand for domestic purposes.

The light of the fire is generally sufficient for illuminating the interior of the hogan. In houses of modern construction, however, candles and oil lamps have been introduced to a great extent.

Fire also figures ceremonially, and is then sometimes referred to as "the pokers," from the leading feature of placing pokers at the cardinal points around the fire. Heaps of firewood are placed at each side of the entrance inside the hogan, which is then closed with an additional blanket hanging in front of the ordinary blanket curtain. The singer, patient, and all present, strip to the breechclout (women remove the jacket only), and sit or lie around the fire, which is kept going until all of the firewood, previously carried inside, has been consumed. After producing emesis by means of a concoction and a feather put into the throat, the patient and those present repeatedly walk around the fire, and finally two of the men jump over it from each of the cardinal points. Thereupon all leave the hogan for a few minutes to sun themselves and rub their bodies with sand, and then return to the hogan for the close of the ceremony. This usually takes place in the forenoon, and during its progress none of the inmates

of the hogan may leave it. One of the family remains outside to assist with anything that may have been forgotten.

In some instances, too, ashes figure ceremonially, as well as in the preparation of bread, or spicing of some herbs. Ordinarily, however, they are removed from the hogan and thrown outside.

Signalling by fire was done from some favorable point of vantage. A blanket was held or passed repeatedly over the fire to intercept the rise of the smoke. Little of this early warfare measure seems to be remembered at the present day.

(Cf. also fire dance, use of charcoal as color, the shinny stick, et alibi.)

khû', or khô', fire.

wolká, fire drill, the tinderbox.

beolká, the drill-stick or whirl, which is also called náyz, or dilyfzi, the drill, or hogfshi, the stick.

didishjé (dædŋja, or didŋje, dídeshjá), or dédishje (dedŋja, dedideshja), I kindle a fire, carry fuel.

dishtlíd (dŋtlá, dīdeshtŋl), I light a fire, make a light.

dishŋlíd (dŋlíd, dīdeshtŋl), I burn something.

béshtŋl, steel flint; tsétŋl, stone flint; tsíntŋl, wood flint, hence tsíntŋlé, a match.

tŋlkhû', fire struck with a drill or flint.

diltŋ', a flame; chízh, fuel (wood); destŋn, pine; díŋkŋs, cedar; lejín, coal; bëshbíkhu, a modern stove; chílayŋ', a smoke-hole, chimney.

ŋd, smoke. A volume or cloud of smoke is expressed by ŋd bechaháŋéŋ, darkness; ŋd betŋé, night is caused by smoke; ŋd yáŋŋ' (yādaŋŋ'), a column of smoke ascending upward; ŋd dahŋkháŋ (nŋé), a stationary streak of smoke, or ŋd da'sŋtsōs (nŋé), a fleecy cloud of smoke, or ŋd dá'ojól (nŋé), a scattered cloud of smoke, as is often seen on a quiet morning.

ŋd díŋgá, or ŋd yŋgá, a signal by smoke; ŋd dishgá (díŋgá, dīdeshgá), or ŋd yishgá (yíŋgai, yīdeshgá), I give a signal by smoke.

t'ēsh, charcoal; t'ēsh dishlīd (dīlīd, dīdeshlīl), I make charcoal.
dīlīd, it is burnt; hoghān dīlīd, or (hoghān) adīkān, a burnt
hogan or house.

lēshchīf, ashes.

hadó', heat.

hogīshi, the pokers; Kékeholtqád sázf, broken off and knotted
yucca for unravelling (used in connection with pokers).

achīdidoljē, the fire will take place (lit. the fuel is stacked).

achīdédilja, the fire has been made.

sīl, the steam (of boiling water).

COLOR.

The various methods of preparing dyes for wool and leather are described elsewhere. Similar use of color is made in the decoration of the arrow, of the shield, pottery, and gourd rattles, while the decoration of basketry is obtained with vari-colored twigs.

The prayersticks are colored white, blue, yellow, black, red, speckled, spotted or striped, according to ritual prescription, to represent the divinity worshipped. The colors are a mixture of water with surface coal (lējfn) for black, water and yellow clay (lētsoi) for yellow, white clay (dlēsh) for white, while the soft turquoise, or a similar stone (adishtlīsh), is pulverized and mixed with water for the blue color. The spots and stripes for some prayersticks vary according to prescription, and are obtained with any of these colors, one of which is the prevailing color on the body of the prayerstick. The colors are applied with brushes made of yucca strips.

Ketā yishdlīsh (shédlēzh, deshdlīsh), or Ketā beshdlīsh (beshé-
dlēzh, bédeshdlīsh), I paint the prayerstick.

tsázf ntqéli, the yucca (brush).

adishtlīsh, soft turquoise.

lētsoi, yellow clay, brimstone.

lējfn, surface coal.

dlēsh, white clay.

hagai, white; litso, yellow; dotlsh, blue; dilql, dark; lizhn, black; lichf, red; ketā dīnlchf, the brown prayerstick with black and red stripes at ends.

biketān disōs, glittering prayerstick, black body rubbed with red clay (deschf).

biketān nodōzi, its prayerstick is striped, or likhfhz, spotted, as for instance, the prayerstick of the skunk or puma.

The ingredients for the colors of the sand painting are sometimes mixed with sand or dirt to allow them to flow more readily in drawing the lines. White is obtained with a kind of gypsum (tsé' hagai), which is pulverized, yellow with yellow ochre (tsé' litso), and red with pulverized red sandstone (tsé' lichf). Black consists of charcoal (tēsh), obtained from burnt scrub oak (chēchil ntīz), or, for the night chant, from dry cedar charcoal (dīlkis bitēsh), which is mixed with dirt (lēsh). Blue is obtained with a mixture of pulverized charcoal and gypsum added to the dirt. Vari-colored pebbles, however, are not used for the sand paintings.

These preparations are put on bark trays from which a pinch is taken between the index finger and thumb, and allowed to drop on the layer of moist sand, or the "altar," forming the foundation of the drawing. The singer usually superintends the work, directing and correcting his assistants, of whom as many as five and more are at work on the larger drawings. These are made in the hogan, and vary in size and number for the individual chants of which few, if any, are entirely without them. The patient is seated upon the finished drawing which, after various invocations and rites, is erased, and the dirt and sand removed from the hogan.

tsé' yikān (ikān), pulverized stone.

tsé' yishkā (yikā', deshkā), I grind or pulverize stone.

tsé' hagai, native gypsum, white ochre; tsé' lichf, red sandstone (ochre?); tsé' litso, yellow ochre.

tēsh, charcoal; chēchīl ntīz bitēsh, scrub oak charcoal; dīlkīs bitēsh, dry (red) cedar charcoal; lēsh, or dāākēdi lēsh, dirt from the farm; sai dītē, moist sand.

ikhā, the sand painting.

ishkhā (isēkhai, ideshkha), I draw a sand painting.

nā'āshnīl (nasēnīl, nā'deshnīl), I pass through my fingers.

ikhā nashnīl (nasēnīl, ndeshnīl), I draw (lines of) a sand painting.

ikhā ashlē, I am making a sand painting.

ikhā nnādzīd (nnazēzīd, nnādeszīl), I erase the sand painting.

For directional assignment of color see article on directions. In accordance with this assignment the representations of the sacred mountains, which accompany many sand paintings, are decorated in that color, namely, white for the mountain of the east, blue for that of the south, yellow for that of the west, and black for the sacred mountain of the north.

In summer the face and forehead is painted with a mixture of red clay and tallow to protect the skin from the heat of the sun, while in winter this is done as a precaution against chapped skin.

ādishchī (adeshchī, ādīdeshchī), I redden my face, paint it red.

chī, red clay; tlā, grease; akā', tallow (goat or sheep tallow).

hanīchī, the face is painted red.

hanītēzh, the face is painted black, as is done at the war dance, or as the gamblers do when the moccasin game is played after sunrise.

Animals are often distinguished from one another by their color.

mā'i, the coyote; mā'i dotīsh, the kit-fox; mā'i litso, the yellow fox.

nashdūtso, the mountain lion; nashdūlbai, wild cat.

nashdūlkhlzh, spotted puma.

wolāzhīni, the black ant; wolachī, red ant; wolachītsoi, yellow (red) ant.

debē lizhni, black sheep; debēlchī, red sheep (brown); debēlgai, white sheep, etc.

hlgai (h lagai), white horse; **h dotfsh**, blue (gray) horse;
h litsóigi, yellow horse; **h lizhfnigi** (hshzhfn), black horse;
h lichfigi, red (sorrel) horse; **h likhfzhi**, spotted (pinto) horse;
h niqfnigi, (oily) mouse-colored horse; **h dinlehfigi** (dinlchf),
 bay, light brown horse; **h dlnlzhfnigi**, dark bay (brown) horse;
h labá'igi, roan horse.

Or its color is indicated by its mane.

bitsfghá lagáigi, white-maned (cream or buckskin colored)
 horse; **bitsfgha lizhfn**, black-maned; **bitsfgha lichf**, red-maned.

Similarly, minerals, stones, clays, and a host of other objects,
 are either described or differentiated by their color.

To summarize, the different colors are designated as follows:

lagai (-lgai, -gai, -gá), white.

litso (-ltsúí, -tso), yellow.

dotfsh (dotfshzhi, -tsh), blue.

lizhfn (-zhfn, -lzhf, -jfn), black.

labá' (-lbaf, -ba'), gray, roan.

lichf (-chi, -lchf), red.

likhfzh, spotted, which is used for any kind of spots; red, or
 black and white, white and yellow, etc.

lizhfn be likhfzh, black-spotted, etc.

yistfn, freckled, dotted (very small dots).

nodóz, striped (vertically); **nágo nodózi**, striped (horizontally).

lichf benodózi, red striped, etc.

dlnlchf (dlnlchf), light brown; **dlnlzhfn** (dlnlzhfn), dark brown.

dlnlgaf, light yellow, white with an admixture of yellow, a
 tinge of yellow; **lichf dinlgaf**, pink, or red with a tinge of white;
dlnlbá', stone gray, white with a tinge of black; **dlnltsó**, yel-
 lowish, a pale yellow.

dilqfi, a dark, usually black color.

disóe, glittering color, speckled; **bisdflíd**, glossy; **bisdflídgo**
ashlé, I give it a gloss, brighten it; **bitsá'diflíd**, or **bitsá'dináka**,
 a bright color.

nltqóli, silvery; nilqíni, oily, mouse-colored.

tqáthíd nahalfnigi, like water scum, green.

tsedidé nahalfnigi, like four-o'clock, purple.

debélchí nahalfnigi, like the color of a red sheep, subdued red or brown. Other comparisons are used in a similar manner.

táyisi lichí, crimson, or táyisi lizhín, true or fast black, etc.

The object colored is designated in a similar manner.

yilzhí, colored black; yiltsúí, colored yellow; díltfízh, colored blue, etc. Variegated objects are designated by qualifying adjectives, such as,

al'á at'éli, as, aghá al'á at'éli, vari-colored wool, or altqás'al, vari-colored; altqanástsí, mixed colors.

The condition and progress of vegetation, the variety of color in a blanket or cloth, variety in a landscape, and similar qualities, are usually described by their color.

nadá yichí, (corn is red), the awn appears, corn is in blossom.

nihidígái, it is white, flowers are blooming, it is spring.

fdahotso, they (the fields) are yellow, it is autumn.

yibá', it is gray, the ground is covered with snow in spots.

da'ichí, mixed with red, a strip or line of red runs through the body of it, etc.; da'ibá', a little mixture of gray; da'igai, of white; da'itsó, of yellow; da'itfísh, of blue; da'fjín, of black, or jfjín, a black line (on the breast of an animal).

dadzágai, a strip of white soil; dadzétso, of yellow; jichí, a strip of red soil; dajfjín, of black; dadzébá', of gray; dazhdætfísh, a strip of blue soil; tqábá'jfjín, black watermarks; tqábá'-dságai, white; tqábá'dzftso, yellow; tqábá'jfdætfísh, blue watermarks, caused by the splashing of the waves.

dzillfjín, black strip mountain. (Cf. also local names).

The particles ho (qo) or ha prefixed to color usually indicate a large circumference of landscape.

hotso (hotsóí), a meadow; háltsó, a green patch or field.

n'ḥāichf, the red (lower) world; n'ḥodotfsh, the blue world.
n'ḥoditqfl, the dark world.

Words Referring to Measure and Distance.

The length and breadth of an object is measured by the span, by the width of the fingers, or by stepping off.

yidés'ēs, a pace, as dīsdin didés'ēs, forty paces.

bil kidesnī, the reach, of the extended arms.

hagān biké'āgo, arm's length, from socket to tip of middle finger; agān aqādītān (gā hadītādo), elbow's length, from the elbow joint to finger; halatsfn, wrist's length.

hālā nézhi, the length of the middle finger; hālā tsostsédi, the index finger; atqá'i, the fourth finger; hālā yāzh, the little finger; hālātsó, the thumb.

hālāzhōzh, fingers taken collectively. The measure is usually from the knuckles up. Expressions like ānlāes or aqēntso, as large as, are used in this connection, as hālā nézhi ānlāes, so long as the middle finger, etc.

hālāzhōzh atqá'i, the joints of the finger, usually the middle joint, the particular finger being mentioned in that connection.

dabaf biké, tqā biké, one or three fingertips long, for instance, a prayerstick. This counts up to ten, neznā biké, ten fingers, or the width across the knuckles of both hands, which, in turn, is equal to a span.

yflā destsód, finger span, from tip of thumb to that of the middle finger. Blankets, poles and other objects are measured by this span. When another finger is used for the span this is mentioned, as yflā destsód yflā tsostsédi be, spanned with the index finger, etc; yflā tsostsédi aqānila, folded index finger, the span from the thumb to the second bent joint of index finger.

Another measure is from the bent fingers (bflā ba'ā'āgo) of the left outstretched arm to the right nipple (bibé'). Other lengths are paraphrased by showing the size on the finger, or with a small stick and khūntso, so large, or some similar expression.

Distances, too, are indicated by comparison, such as the distance between two well-known points, or by pointing out the time required to cover the distances, as for instance, *shá'bíghá njaghágo*, by walking all day. At times the distance is indicated in a very indefinite manner, by words such as *nízád*, far.

tsé sètqá, the milestone, a mile, is now used by some in designating the distance from one point to another; thus, *tqá tsé sètqá*, three miles.

Words Referring to Surface and Solid.

By way of illustration, and as an aid to memory, lines are sometimes drawn on the sand. Various figures are designed in blankets and depicted in sand paintings or on prayersticks, and are now also seen on cloth and paper. The Navaho do not tattoo, neither do they write, draw or design on paper or leather.

gehésdön (*kehésdön*), or *tsahésdön*, straight, in a straight line, vertical.

nánígo (*nágo*), across, horizontal.

násbás (*názbás*), round, circular, a circle.

násmás, round, spherical, globular; *numázi*, round, globular.

alkínásbás, a double or encircled circle.

názháhi, pronged downward, semicircular (pendant).

dijól (*dijóli*), round, ball shaped.

dahitqá, crescent shaped.

alkésgiz, spiral, like a corkscrew; *alkéhenetsé*, spiral, coiled, like the tendril of a vine; *hanótsé*, coil (a flat or conical helix, like the native basket); *nánistsé*, a coil.

báhadá'azhá, hemispherical, curved.

bíháltá', concave, hollow, as the interior of a basket.

nólt'ish, or *nánisht'ish*, zigzag or winding like a snake.

qétóós, pointed, cardate, elliptical; *nólt'ishgo qáhashchí*, oblong, with waving or zigzag lines; *qáhashchí*, oblong and tapering; *istlá'*, angular; *dahágo istlá'*, a single angle; *dígo istlá'*, quadrangular, in the shape of a zigzag.

dákha (nahálin), card shaped, is used for square, accordingly dakháni, quadrangular, a cube or square.

des'á, pointed, projecting, such as a stone or mountain, or the lobes of a leaf, as dígo des'á, four lobed (clover), or the four angles of a square; tqágo des'á, triangular.

dalágo des'á, a right angle.

nodóz, or dónodóz, vertically striped lines; nágo nodóz, horizontally striped lines; alnánodóz, crisscross, when the cross stripes are easily distinguishable; alnánedíz, crisscross, where the lines cross too close for distinction, consequently they are twisted or tangled.

tsín alnáozíd (tsí' alnáozíd), crossed.

alnf na'ídzo, merely denotes a line intersecting a cube vertically or horizontally, or a cross inside; if diagonal lines are added it is alnf yilnádaosdzo, or the center with lines.

dákha nahálin qáhashč'esh, or yistfín, checkered.


nádfkí', parallelogram; qáhashchí, is a diagonal line through it; alnigo dāzhniltfísh, a square with zigzag lines in the center, or aqánigo dāzhniltfísh, with waving lines close together, or aqánigo nēltfísh, closely winding.

qáhashchí altsáji, or qets'ós altsáji, drawn out on both sides, as in a diamond figure; beditf' nahálin, diamond shaped, or shaped like the native slingshot.

kós ishchín, cloud effect,  a triangle set upon a square.

ídēsghás, cogged, serrate; nahinestšé, flat coil.

shézhá', crooked; dézhá', or deshzhá, pronged, as a horn.

ídeshgízh, forked; altqānetšé, interlocked, clutched, like the fingers or thorns, or a comb in use; nānotšé, the comb in the warp; aqínkhānediz, interlocked (the upper part of interlocked fingers); nāzhá, crescent shaped, curved; alclí'hāzhá', curved toward each other, as (); altsānāzhá', curved from each other, as). Similarly, bāhāzhá', hemispherical, curved, as .

aldé' baqa'tá, semicircular, with points upward, as .

alclíshdæ bahábás, intersected semicircles, as .

aqiházhá', two semicircles of this shape: ()

alnígi, the middle, center of anything.

altsá'húntsogi, the same size all around, the center of a spherical object.

dichízh, a rough surface; **dilkhó**, a smooth surface.

nélzá', ridged, as in **tsín nélzá'**, a ridged line of timber, the wavy outline of trees; **qanádíz nélzá'**, the eyelashes are spread out; **tqónélzá'**, a drizzling rain; **daistló nélzá'**, the wool is undulating in appearance.

ntqél, wide; **hótqél**, a wide surface; **t'ó ntqéli**, it widens.

bagháhodzá, it is punctured, perforated; **baghádaásá'**, it has been perforated with an instrument, a hole.

aqdířá, an angle or point on a hard object.

aqdíř', an angle on a soft surface.

aqdadídlínigi, an angle of streams, the meeting of arroyos.

aqdaditqínigi, the fork of a road.

nizhúnigo óqola, it is nicely made or arranged; **łágo ádět'égo áyolł**, he makes various new designs; **nizhúnigo ó'ólł**, he makes beautiful things, he executes well.

THE NUMERAL SYSTEM.

The Navaho follow the decimal system. The numerals to four differ little from other Athapascan languages, which also present additional similarities of construction at least. (Cf. Goddard, *Morphology of the Hupa language*, vol. 3, page 32-33.) No additional terminations are used to distinguish the number of persons and things, the number being added to the object expressed, as is done with any ordinary adjective. The same exceptions, too, as with the adjective obtain with the numeral, which is placed before nouns denoting coin, **nezná béso**, ten dollars. Frequently the number of objects is expressed by the dual and plural forms of the verb making specific mention of the numeral superfluous.

Few ordinal numbers exist, as the order of sequence is usually

not referred to, or if it is, the terminals are specified as first and last with the intervening objects or persons preceding or following them. Ordinarily, however, the object is specified sufficiently by description. Multiplication and repetition are indicated by the particle *di* added to the numeral, as, for instance, with the numerals from two hundred upwards.

Counting is usually done on the fingers beginning with the little finger of the left hand to the thumb, and continuing with the little finger of the right hand up to ten. If over ten the same method is repeated. At times the fingers of both hands are extended and the exact number of objects is indicated by turning the surplus number of fingers down. By way of illustration, the sequence of events, or the number of objects, is pointed out on the fingers usually by turning them down from the little finger upward.

In the moccasin game sticks, and in the stick dice game stones are used as counters (see games). Very few persons record their age by marks cut in stone, or any similar manner. Whenever occasion requires, however, some well-known historical event forms the basis for computing one's age, though recently more attention is given to the American method of computing the number of years.

THE NUMERALS.

<i>dahf</i> , or <i>M'i</i> (<i>M'</i>), one.	<i>hítáda</i> , eleven.
<i>nákhf</i> , two.	<i>nakhítáda</i> , twelve (<i>nakhí-</i> <i>dzáda</i> , <i>tqadzáda</i> , etc.)
<i>tqá'</i> , three.	<i>tqátáda</i> , thirteen.
<i>dí</i> , four.	<i>dítáda</i> , fourteen.
<i>áshdlá'</i> , five.	<i>áshdlá'táda</i> , fifteen.
<i>hastqá</i> (<i>qastqá</i>), six.	<i>hastqá'táda</i> , sixteen.
<i>tsótséid</i> (<i>tsótsééd</i>), seven.	<i>tsótsééd'táda</i> , seventeen.
<i>tsébf</i> , eight.	<i>tsébitáda</i> , eighteen.
<i>nahastá'</i> , nine.	<i>nahastá'aitáda</i> , nineteen.
<i>nezná</i> , ten.	
<i>nádín</i> , twenty; <i>nadín M'</i> , twenty-one; <i>nadín nákhf</i> , twenty-two, etc.	

tqádín, thirty; tqági lá', thirty-one; tqági nakhl, thirty-two; tqági tqá', thirty-three; tqági dí, thirty-four, etc., or tqádín dóbá'á dalaí, nakhl, tqá', thirty-one, thirty-two, thirty-three, etc.

dísdín, forty; dízi lá', forty-one; dízi nakhl, forty-two, etc., or dísdín dóbá'á dalaí, forty-one, etc.

ashdládín, fifty; ashdlá'á', fifty-one; ashdlá' nakhl, fifty-two, etc., or ashdládín dóbá'á dalaí, fifty-one, etc.

hastqádín, sixty; hastqá lá', etc., or hastqádín dóbá'á dalaí, etc., sixty-one.

tsöstséddín, seventy; tsöstséd lá', etc., or tsöstséddín dóbá'á dalaí, seventy-one, etc.

tsébídín, eighty; tsébi lá', eighty-one, or tsebídín dóbá'á dalaí, etc.

nahastádín, ninety; nahastáí lá', or nahastádín dóbá'á dalaí, ninety-one.

neznádín, one hundred; nezná lá', one hundred and one; nezná nakhl, one hundred and two, etc., or neznádín dóbá'á dalaí, nakhl, one hundred and one, and two.

nezná nezná, one hundred and ten; nesná látsáda, one hundred and eleven, etc.

nakhi di neznádín, two times hundred, two hundred. Other numbers are added, as nakhi di neznádín dóbá'á dalaí, (two hundred and one), or nakhi di neznádín dóbá'á nezná (two hundred and ten), and so on with the following.

tqá di neznádín, three hundred; dídí nesnádín, four hundred; ashdlá'di, hastqá'di, tsötsé'di, tseb'di, nahastá'di neznádín, five, six, seven, eight and nine hundred.

nezná'di neznádín, or dalaí'di míl, one thousand.

nádín di neznádín, twenty times hundred, or nakhl di míl, two times thousand, two thousand, and so on indefinitely, though the higher denominations are not frequently used.

ORDINALS.

atsé', or atséd (atsédi), the first one.

naákhéde, the next one; nabikhéde, the one after that, etc.

atqáigi zezini, or atqáigi, the one in the middle, or between two others.

akhéde zezini, or akhedéigi, the last one of a number.

há, or há' hazí (azí), once, or that's once; ná'áldó, another time, or nakhidí azí, that's twice; tqádi, dídi, etc., three and four times, etc.; bígha hazí, that is sufficient, or the last time.

do qafda, that is not enough (something more is to be added).

bédestí, it is the first in order, it begins with this, as for instance, a series of songs at a ceremony, or a certain sound (or letter) at the beginning of a word.

bedéltí' (n'é), I begin it with this.

beyishtí' (n'é), I continue with this; beyítí' (n'é), this follows.

benítí' (n'é), I close it with this (song).

benítí' (benfntí'), this is the closing or last one.

Unity, accompaniment, repetition, multitude, fewness, and like divisions of number, are often expressed by adverbial phrases or adjectives, such as the following.

tásáha, alone, singly.

tála dinshtéhe, I do it singly, for instance, I travelled alone.

Other similar expressions are: nakhl, tqá, dí, nil'é, there are two, three, four, etc., of us.

há, some, another; naná, or ná'áldó, again, once more; nanáhá, another one; lá, many, several, not a few, or há' (as diné há), many persons; t'óóqoyú (or emphasized, t'óóqóyüi), very many, innumerable, a large number.

do háda, few, not many; álcáíndi, just a little, few.

alá, divers, various, or alá á'téli, divers kinds; altqás'al, or altqanástal, various, all manner of; bíl tqáchá, along with, together with; t'áaqá, together, in a body; dániltso, all of us together; danóltso, all of you together; alnáho'já, exchange alternately! bí'ilnáhashtásh, I alternate with him.

tááxífigi, any kind, or dadoléi, sundry things.

há' is also used for any. At times any is expressed by da' huló, have you any?

Words Referring to the Various Parts of the Body.

The Navaho does not practice surgery, nor is he skilled in the anatomy of the human body. As no differentiation is made in regard to the different parts of the human and of the animal body (except the specific parts), the words here listed are applicable to both.

hatsís hazhí' a'á adolyéhego, the various anatomical parts.

THE HEAD.

<i>sítsítsín (sítsítsín)</i> , my head.	<i>atsiyáháldsísi</i> , the cavity in
<i>tsítsín</i> , the skull.	the rear of the head.
<i>tsítád</i> , crown of the head.	<i>akúnk'í'</i> , the rear cartilages
<i>átsíghá</i> , the brains.	from head to neck.
<i>átsiyá'</i> , the occiput.	<i>atqá'</i> , the forehead.
<i>atsiyáshjásh</i> , (lower) back	<i>bitsítsín sít'é'</i> , a flat head.
of the head.	

THE HAIR.

The hair is scoured with yucca suds and dried in the sun. It is then dressed with a whisk made of mountain grass, and twisted and tied in a bundle on the back of the head, where it is secured by means of a hair cord. The queue was formerly wrapped and hung over the neck after the fashion of the Pueblo Indians.

<i>tsíghá</i> , the hair.	<i>tsíshchíli</i> , curled hair.
<i>sítsí'</i> , my hair.	<i>tsínés</i> , long hair.
<i>tsídá' yanilzhé</i> , (hair stands	<i>tsídiyüq</i> , short (cut) hair.
up), the cowlick.	<i>tsí díchósh</i> , stiff or stubby
<i>bitsí dādeszhá</i> , disbevelled	hair.
hair (stands on ends).	<i>bitsí bē'ód</i> , (peeled off),
<i>tsíbá'</i> , gray hair, or turn-	bald.
ing gray.	<i>tsítád dādálchí</i> , baldheaded.
<i>tsíbaláigai</i> , white hair.	<i>bitsí dānaskhād</i> , hair tuft
<i>tsíghá'ízhín</i> , black hair.	on a bald head.
<i>tsíshbízhi</i> , braided hair.	<i>tsízis</i> , the scalp.

tsigháshchín, a wig (which is made of horsehair and used occasionally in ceremonies).

tsiyéí, the queue.
bitsiyéí ntsáí, a large queue.

THE FACE AND FEATURES.

ánf', the face.
shinf', my face.
ánf'kéd, (cavity of the eye), the features.
anf' dāhishchíí, contracted features.
ánishjá', the cheekbone.

shinitst', my cheek (flesh of my face).
át'á', the temples.
nīshzhín, a dirty face.
ánf'síłtsósi, a wrinkled face.
binf' nōj', a wrinkled face.

THE EYE.

aná, the eye.
shiná, my eye.
ánát'esh, the eyebrow.
ánádís, the eyelash.
ánádaádís nnaes, long eyelashes.
ánáshzhín, the pupil.
ánágai, the white of the eye.
ánázís, the eyelid.
ánát'sín, eyebrow bone.
ánátqá', between the eyes, bridge of the nose.
nīkishtqó, the tears.
ánf'kéd, the cavity of the eye.
ánf'kéd qádādesht'ish, I'll give you a black eye (I'll make your eye cavity blue).
shinákis, the grove of my eye.
binákisi, or nákisi, a one-eyed person.

ná dot'izhi, blue eyes.
náshzhín, black eyes.
nālchf, pink eyes.
biná lichf, bloodshot (red from want of sleep).
nátsóho, big, bulging eyes.
nát'shi, small eyes.
náshchíí, squint-eyed, contracted eyes.
nádígísi, cross-eyed.
shinádígés, my eyes are not straight (crossed).
náyai, a mark below the eye.
nákéldóhi, pink or running eye (of a horse). This is used to designate an albino. The Navaho have no albinos.
biná dení, a good eyesight.
bi'íłké huló, a defective or poor eyesight.
shiníłké nánt'í' (nté), I am blindfolded.

THE EAR.

ăjă', the ear.	ăjětîsh, the eardrum.
shijă', my ear.	ăjéchîn, the earwax.
ăjătsîn, the earbone.	shijă nătî', my auricle.

THE NOSE.

ăchî', the nose.	chî' âdini, a flat, very flat nose.
shichî', my nose.	chî' hakâli, aquiline nose.
chîsh yâzhe, a small nose.	ăchîshgêsh, the nasal bone.
chî' nêzi, a long nose.	anf', the nostrils.
chîsh dfli, a fat nose.	chîshtă', the interior of the nostril.
chîsh tqéli, a round, broad nose.	bichî' bilâtqâi, the tip of the nose.
chî' dēdâ'âni, a pug-nose.	năshtqîl, mucus (snot).
chîshchîfd, a flat nose.	binf hodîtlô, hair in nose.
chîshqâli, a club nose.	
chîshchô, a ball nose.	

THE MOUTH.

sizé, my mouth.	ndîsdsî, the breath.
ătsô, the tongue.	ăzhé, froth or foam.
azăhătăgi, the palate.	shē', spittle, saliva.
ăzăgi, the esophagus.	.

THE TEETH.

ăwhô', the tooth, molars.	ăwhôshtăgi, the last tooth (appearing at the age of twenty-one).
ăwhôkîs, tooth groove.	ăwhôchân (ăwhôchqân), tartar.
ăwhôtsî', the gums.	nîtsîn, bright or crystal, the glaze of the teeth.
ăwhôshzhă, the eyetooth.	
ătqăwhô, the middle tooth, aside of the eyetooth.	
ăwhôshtă', the interior of the cheek.	

THE VOICE.

iné, the voice.	bizhf' dádeshzhá, a rough,
bizhf', the voice.	unmusical voice.
bíné nzhúni, a clear, pleas-	bizhf'tso, a loud voice.
ing voice.	bizhf' altsósi, a weak voice.
bizhf' bíg'is, a good voice.	bizhf' n'chún, an ugly voice.
bizhf' nchú'i, a poor voice.	

THE LIP.

sizábá, (the rim of my	ayáigi ádá', the lower lip.
mouth), the lips.	dághā (shidághā), the mus-
ádá', the lip.	tache.
ádáigi ádá', the upper lip.	

THE CHIN.

The hair of the chin are scrupulously removed by means of a pair of tin tweezers. The beard is exceptional with the Navaho.

áyatsín, the chin or jaw-	of the jaw (below the ear').
bone.	bidágha (dághā), his beard
shiyatsín, my chin.	(in reference to Americans).
áyatsín des'áigi, the tip of	baghádánaskhád, a tuft of
the chin.	hair below the chin.
áyatsín bihi'áhigi, the joint	

THE NECK AND THROAT.

khós (k'ós), the neck.	ázól dá'dijóli, (trachea), the
k'ós nēs, the long neck.	windpipe.
sók'ós, or sizénagha, my	ádájōzh, the epiglottis, the
neck.	tonsils.
ádáyí', the throat.	át'úg, the collarbone.
ázól, Adam's apple, and	oshgēsh, the cartilages.
vocal chords.	khós, the cough.
ázáigi, the esophagus.	

THE ARM.

āgān, the arm.
 shāgān, my arm.
 āwhós, the shoulder.
 āgāstāin, the shoulder-blade.
 achiāiya, the armpit.
 āgāló', the upper arm.
 agāyái, the forearm.
 adó', the muscles.
 ōzhlá', the elbow.
 āchōzhlá', below the elbow,
 the crazybone.
 ālatsīn, the wrist.
 alātsīn, the wristbone.
 yilá', the hand.

ālātľá, the palm of the hand.
 halatľá hāldzis, the cavity
 at the base of the thumb.
 shľlá', my finger.
 ālātso, the thumb.
 hāla tsōstšēdi, (the seventh
 finger), index finger.
 hāla nōzhi, the middle fin-
 ger.
 hālatqái, the fourth finger.
 hāla yāzh, the little finger.
 ālāshgān, the fingernail.
 ātsōs, the veins.

THE BODY.

āzhf', the body.
 shizhf', my body.
 ātqá', the body.
 sitšá', (box), my body.
 sitšís, the frame of my body.
 sitšáōz'á', the members of
 my body.
 ātsf', the flesh.
 ākhāshtľöl, the hair on the
 human body.
 āchfn, the pores, or the dust
 that settles in them.
 dīl (shidľl), the blood.
 tsīn (tsn), the bones.
 oshgēsh, the sinews.
 atšfd, the sinew.
 āqādīťān (āqādadiťá), the
 joints, ligaments.

āwól (āwúl), the marrow.
 tsōs (ātsōs), the veins and
 nerves.
 ātsōs, artery, vein.
 ātsōstso, the arteries, larger
 veins.
 akāshjā, the hip, the ilium.
 atšōskid, the thigh, the leg
 above the knee.
 ākaf (shakaf), the hip.
 āyfd, the breast (sternum
 with ribs).
 shitqēl (atqēl), my bosom,
 breast or front.
 shinš'đe, my back.
 shināghadé, (from) my
 back.
 shōshkís, or sikkís, my side.

ájéitsáin, the chest, the bust.
 dítló, hairy.
 átsá, the nipples.
 átsá, the ribs.
 átsé, the navel.
 ákhági (shikhági), the skin.
 bitqáhodíchlízh, rough skin.
 bitáin, a skeleton.
 ságán, bony (dried out).
 ábíd, the stomach, the belly.
 achági, the abdomen.
 áchúg, the genitals.
 áchúg bizízh, the scrotum.
 zíz (bizízh), is also used for
 the penis.
 ázíz bakhági, the foreskin.
 áchúg biyézhí, the testicles.
 jöz, the vagina.
 ájlíchlí, the anus.

ísh, the urine.
 chá, ordure.
 átlá', the buttocks.
 t'íd, the gas.
 íghán, íshghán (shíghán),
 the small of the back, the
 spinal column.
 íshghánshkán, vertebræ and
 spine.
 íghán áqádétáni, vertebral
 joints.
 íghán détsági, the ribs con-
 nected with spinal column.
 ánágha, the back.
 ánágháhi, the loin.
 ánf', the waist.
 sés, a wart.
 qís, the pus.

THE VITALS.

ájáí (shijéí), the lungs.
 ájéilzóli, the lobes of the
 lungs.
 ajéidíshjöl, the heart.
 jeidíshjöl bizís, the pericar-
 dium.
 ághás (sághás), the esoph-
 agus (lower).
 átsá, or átsági, the bowels.
 ábíd, the stomach.
 áchlí, the intestines.
 ábíd íkhíni, or ábíd dishjóli,
 the small intestines.

ázíd, the liver.
 átsáshjish, the liverbag.
 átsáshkáshi, the kidneys.
 átlísh, the gall.
 átlísh bizís, gall bladder.
 álízhzís, the bladder.
 átsí, the womb.
 chóyín, menstruation.
 átsástqín, the fetus (also
 used for abortion).
 awé biyaháí, the placenta,
 afterbirth.

THE LEG.

ājād (shijād), the leg (femur).	ātsōstso (tsōstso), the arteries of the leg.
ājāskhīs, the lower leg.	āwhód (showhód), the knee.
āchōsh, the calf of the leg (tibia).	āwhúd dāstān, the kneecap.
ājāstqīs, the shin (fibula).	

THE FOOT.

khē (shikhē), the foot.	ākhē yāzh, the little toe.
ākhēnī', the instep.	khāgūdi, short-footed.
ākhétlā, the sole.	khē yistqīn, a frozen foot.
ākhétqāl, the heel.	khēshgūli, clubfooted.
ākhētāin, the ankle (bone).	khēwhūz, a bunion.
ātsātsīd, tendo Achillis.	khébā ntflsgo dā'naznfligi, (the ridges of the toes are hard) corns.
ākhēzhōzh, or ākhē dinībī-ni, the toes.	khékē', footprints.
ākhétso, the big toe.	bikhétso ādin, a missing toe.
ākhē né'hi, the second toe.	bikhē sītīé, a flat foot.
ākhē nī'ī', the middle toe.	khējōl, a ball foot.
ākhétqā'i, the fourth toe.	ākhētsī' or behētsī', ankle.

Words Referring to Disposition and the Faculties.

yāaqalyā', he is careful and sensible.
do-aqalyāda, careless, foolish; tōdōōqalyāda, he has no sense.
tōbīnī' ādin, a brainless fellow, a dunce.
tsfdesyis, timid, or I am frightened.
do-infniāda, or tōqodīgis, absent-minded.
altqāhanāshdonīl, an unsettled, changeable disposition.
do-bfneshdlīda, I take no interest.
do-ādfnædlīda, he takes no interest, has no ambition.
ādfnædlī', ambitious, he has ambition.
ayūitægo yfnædlī', he takes much interest.
sē'īd, I am nauseated, disgusted.
asē'īd, complete nausea, I am disgusted.

aidél (property) **yichá yidélín'**, an avaricious, miserly person, one who amasses a fortune.

qágo shí aái yolí, insatiate, unusual desire for wealth.

bilnáhüntlá', or **tódigís**, an awkward person.

hantsfkhæs ádlín, he has no brains; **ntsfkhæs**, a thought, an idea.

bentsfkhæs, his mind or opinion; **shí ntsfkhæsi**, what I had in mind; **bikégo ntséskhæsi**, my soul, that is, that which prompts me to think; **ntsfílkhæsi**, through which I think, my soul.

bantsfkhæs (**bantsisékhæs**, **bantsfdeskhös**), I think, as in **qat'ish bantsfíkhæs**, what do you think of it?

níssín, or **nsín** (**nt'é**), I think, I desire.

baáqénsín (**baáqænzí**, **baáqædfnesíl**), I am grateful for it.

lænsín (**lænzí**, **lædfnesíl**), I am jealous of.

shíl bæhozín, I know it; **shíl bæhözín**, I knew it; **shílbæhodózíl**, I will know; **shílbæhözín dolél**, I shall have known.

shílbæhözín nt'é, I used to know, I have known.

shíl bæhozí laná, I wish I knew; **shíl bæhodózíl dâtsí?** may I learn what it is?; **níl lá bæhodózíl**, you may!

Usually these forms are abbreviated: **do-bá'sínda**, or **do-bæ-sínda**, I know him or it; **básínsh?** **do-yæhózínda lá!** know it? it isn't known! nobody knows; **shæhodílzín** (**shæhodílzín nt'é**, **shæhodíldózíl**), I am, was, and will be known.

shæhózín (**nt'é**), this is known to me, as **do-næhózínda lá**, you are not known here.

qá'dínsh'í (**qá'dél'í**, **qá'dídes'hí**), I learn his character, I find him out; **bídínsh'í**, I learn of it.

qá'shídí'í (**qá'shídél'í**, **qá'shídídól'í**), I am caught in the act.

shijá shídíjíl (**shijá shídíjíl**, **shijá shídídojíl**), I hear of it in time, or **shijá ózní**, I took the hint, I got news of it.

qædishchíd (**qádeschíd**, **qá'dídeschíl**), I make a gesture.

nashchíd (**nshéíchíd**, **ndeschíl**), I make gestures; **naqáishchíd** (**naqáííchíd**, **naqaádeschíl**), I point out to another; **náishchíd** (**náííchíd**, **naádeschíl**), I point at it.

aqéshkhád (**aqisékhád**, **aqfdeskhái**), I applaud, clap my hands.

SEEING.

yish'f, I see it; nél'f, or yíltsá, I saw it; yidestsél, I will see it.
 yistsé' (yíltsá, yidestsél), I see it.
 desh'f (dél'f, didesh'f), I look at it; t'áji desh'f, I look back.
 chæqadesh'f, I overlook, or search in vain for it.
 qádish'f, I search for it; tqádish'f, I go about searching.
 hanshtqá (hanétqá, hadínéshtqá), I look for it; chæhanshtqá,
 I could not find it; nakhanshtqá, I look for you.
 nesh'f (nél'f, dinesh'f), I look at it.
 ádinesh'f (adfesh'f, ádínesh'f), I look at myself.
 nailtsé, it appears, it is seen at times.
 shidot'f, (shidíltá, shidídoítsél), I am seen at a place.

HEARING.

adistsá', I hear, I know; adistsé' (adisétá, adídesté), I hear it.
 isistsá' (Fut. idésté), I listen; isínítsá', listen!
 daístá', they pay attention.
 yístá' is also used in the meaning of "it is reported," as
 qúisqí yístá, his death is reported or rumored.
 ná'íltá' asézi, or yiká'íltá', a gossip, eavesdropping.
 zóz itá', a buzzing sound.
 ná'áshclízh (n'æ, and náshéclízh, ná'deshclízh), I make a noise.
 áqodiszé (aqodíze, áqodídeszi), I am quiet, noiseless.

TOUCH.

níshnf (nséní, ndeshnf), I feel it, I have the sensation.
 nánshní (nanéní, ndíneshní), I touch it or him.
 bídinshnf (bídinshní, bídídeshnf), I touch or feel it.
 nnshísh (nnshísh, ndéshísh), I touch with a stick.
 nnsté (nítá, ndéstá), I touch or poke with a stick.
 nanshqí (nanéyí, ndíneshqí), I push or shove him.
 naníshqí, I shove you.
 bídíshní (bídeshní, bídídeshní), I caress or rub it.
 ádídishnf (ádídeshnf, ádídídeshnf), I rub myself.

diédsł (dédsl, didédsl), I lift it, pull a string.
ndās, it is heavy; **yłzhóli**, it is light.
shakášhjá adishní (adéshní, adídéshní), I hold my hands akimbo.
alnándinshní (alnándinshní, alnándideshni), I fold my arms.
qanášchłłd (qanáčłłd, qádeshchłł, or qanādeschchłł), I scratch it out with my fingers.

SMELLING.

yishchín (shéłchā, deshchłł), I smell it.
bitqášhchín (bitqāshéłchā, bitqadeshchłł), I sample foods by smelling; **łakhán** shłłhálchín, it smells good to me.
do-hálchında, he can not smell, or, it is odorless.
łakhán hálchín, it has a sweet smell; **dołózh** hálchín, it has a sour smell; **dłčłł** hálchín, it smells bitter (such as **tśā'**, sage-brush); **dłdzıd** hálchín, it has a rotten smell; **łłkhó** hálchín, its smell produces a sensation of vomiting (as with rank food, etc.)

TASTE.

yishłł (sélł', deshłł), I taste it; **ashłł** (nłśé), I taste of.
bitqāshłł (bitqāsélł', bitqādeshłł), I sample by tasting.
do-halnfıdā, it or he is tasteless.
łakhán halní (nłśé), it has a sweet or pleasant taste.
Other words are formed similar to those listed under smelling, such as **dołózh**, sour; **dłčłł**, bitter; **dłdzıd** and **łłkhó** halní, decay and vomiting taste.
dāmá, or **dłbıd**, an appetite; **do-dāmáda**, **do-dłbıda**, without appetite; **dłnshbıd** (nłśé), I have an appetite; **chıyá** bėshbıd (nłśé), I have a very good appetite; **chıyá** yėlbıd, he has a good appetite.

EATING.

ashá (ıyá, adeshłł), I eat; **ash'ál** (f'ál, ādesh'ál), I chew; **yish'ál** (ıf'ál, desh'ál), I chew it; **astśé** (łłtsė', adestśé'), I eat a gruel; **łłshłłś** (ıyėłłś, diyėłłś), I eat gruel; **tqādışłł** (tqadiyá, tqādideshłł), I eat very little, I taste of food.

nanstsód (nañtsód, nádestsól), I give you food.
 tsín beshqásh (bægñāzh, bídeshqásh), or tsín bídishtá (bídeshtá,
 bídideshtá), I gnaw at a bone.
 yishnád (yñnád, deshnál), I lick it.
 nanshnód (nanénód, ndñneshnól), I lick it.
 nánnshnód, I lick you.
 yishchál (yñchál, deshchál), I lap (water).
 (Cf. Navaho Foods.)

SWALLOWING.

ishné (ñná', ádeshná'), I swallow it; chæishné (nt'é), I tried to
 swallow; chædahishné' (nt'é), I cram my mouth.
 aqishné (aqéñná', aqidéshné'), I gulp the food.
 ìldisdí (ìldésdsí, ìldidesdsí), I stifle with food.
 shiyf' bíchñish (shiyf' bíshchñish, shiyf' bídochñish), food irritates
 my throat; shídítqá (shídítqā, shídídotqā), I hawk it up.
 adiqáho dídíshkhó (nt'é), I clear my throat.
 shidáyf' nánsdzíd (nanéldzíd, ndínésdzíl), I gargle my throat.

SPEAKING.

yáshtqí (yáltqí, yádeshtqí), I speak.
 do-yáltqída, he is dumb; bitsó yeyáltqí, he stammers, he speaks
 with his tongue, or do-hatsí yáshtqída, I lisp; biyígo yáltqí, he
 whispers. Whispering is not practiced frequently.
 qasdsí (hasdsí, qadesdsí), I reply, answer; shicñí handsí, speak
 to me, answer!
 bílqashní (bíñhñeshní, bíñhodeshñí), I tell, inform him.
 dishní (dñníd, dídeshñí), I say, tell; ndishní, I tell or order
 you, as hákhó nñní, he tells you to come; áñá' shíñí jñn, he says
 he asks me to wait; jíní, or jñn, they say, it is reported.
 áññsdsí (nt'é), I stammer.
 ìdishchí (nt'é), I coax him.
 ádahash'ní (ádahosís'ní, ádahodesh'ní), I boast of myself.
 qadishá (qadíá, qadídeshá), I intone a song.

díchál, the talker; qádishchál (n'á), I talk much.

sád, a word, language, speech.

diné bizád, the Navaho language; nakhaf bizád, the Spanish language; belagána bizád, the English language, or dinéké, nakhai ké, belagánaké, in Navaho, Mexican, English.

hanf, a story, a legend; bási hanf, legend of the games.

diyínkégo hanf, the legends of the holy ones, etc.

bízhí, a name, a word; yínshí (yízhí', yideshí), I utter.

nizhúnigo, yá'égo yuzhí', he articulates, pronounces well.

bizhí' nechú'i, coarse language; bizhí' desh'há', coarse, indecent language.

sád altqáhánáshdlí (n'á), I change my language, or sád altqáhanáyodlí, he is freakish, inconsistent, capricious, whimsical.

SIZE AND DIMENSION OF BODY.

nésél (nēyá, dinesél), I am growing.

nínnsé (nínnsá, ndinesél), I continue to grow, I grow larger.

hínshkaf (n'á), I gain flesh; biténi, it is thin; sagán, it is dried out, bony; jobá', it is poor, emaciated.

nanshchád (nánichád, ndfneshchál), I am satiated (swollen again).

yaáshné (yaádsá, yaádeshní), I stoop, lower myself.

yayístqás (yayítqás, yadestqás), I stoop.

táyístqás (tásétqás, táyidestqás), I bend my back, bend back.

ítsí dinshgyé (ítsídlínógó, ntsídlideshgó), I bend my knee, I kneel; níkhídlins'es (níkhídlins'éz, níkhídlides'ís), I genuflect.

WORDS REFERRING TO VARIOUS ACTIONS.

SITTING.

nshdá (nedá, dfneshdál), I am seated, I take a seat.

n'gínshdá, I sit on the ground; nanshdá, I resume my seat, I sit down; bíkídá'nshdá, I mount a horse.

nshkhé (nékhe, dfneshkhel), I sit down with you.

Similarly, n'gínshkhé, I sit on the ground with you; nanshkhé, I sit aside of you; bíkídá'nshkhé, I mount with you.

sedá (nt'sé), I am sitting, or a bird is sitting, roosting; or, it is there; setqf, it is there (a shovel or gun); selá, it is there (a rope).
 sakhád, it is there (a melon, or bunch of grass or trees).
 sá'a, it is there (a single object, as a tree, wagon, box).
 sóltsōs, it is there (a blanket); H sezí, a horse is there.
 shijád alKidayishlé (alKidasélá, alKidadeshlél), I cross my legs.
 tsé'yá nshtqé (sétqf, dineshtqél), I lie flat on my face.
 tsé'daig sétqf, I lie flat on my back.
 ndishdá (ndisdá, ndideshdál), I arise.
 nádishdá, I am convalescent; sēzí (nt'sé), I am standing.

GOING.

nashá (naséyá, ndeshál), I go, walk.
 Hbe nashá, I go horseback; shié be nashá, I wear these clothes.
 chānashá, I leave; t'ádo chānasháhi, I did not leave home.
 áchānashá, I separate quarreling parties, mediate between them.
 bikenashá, I follow him; bikfnashá, I step on it.
 tqáyí'nashá, I wade a stream; banashá, I do something, I am busy; do-banasháda, I am doing nothing; tsí'nashá, I am drunk, crazy (from worry, drink, etc.)
 t'ayídigo nashá, I passed close by; á'tá' nashá, I go to warn another, I warn him; áníd (áni') nashá, I am young.
 nashdá (nasdzá, ndeshdál), I go.
 yaánashdá, I enter slowly; ádanashdá, I come down, descend.
 hoKá hanashdá (hazésdza, hadeshdál), I go up a hill or mountain.
 nashdál (nansdzá, nādeshdál), I return.
 dishá (díyá, deyá, deshál), I go, walk; chāedishá (chāedeyá, chāedeshál), I am tired; tsí'dishá, I am drunk, crazy.
 tqādishá (tqādiyá, tqādideshál), I go or wander about.
 chīnshá (chīniyá, chīdeshál), I leave, go out for.
 naghāngo chīnshá, I pass your house.
 shiníshá (shiniyá, shideshdál), I arrive.
 ndanshá (ndaniyá, ndadeshdál), I head you off.
 ntsashá (ntsaniyá, ntśādeshdál), I leave you, separate from you.
 nikhinshá (nikhfinyá, nikhīdeshdál), I go or leave for home.

- nikhēnshdā (nikhēnsdzā, nikhēdeshdāl), I leave for home.
 chēnshdā (chēnsdzā, chēdeshdāl), I step outside.
 yoishā (yoiyā, yōdeshāl), I go away, leave (abandon my wife).
 nchāishā (nchaiyā, nchāideshāl), I save or protect you.
 qashā (qāyā, qadeshāl), I come up, or out of.
 nanlgo qashā, I walk aside.
 akhashā (ntē), I visit a brothel.
 tākhashā (ntē), I roam or tramp about.
 baghā, or hokā hashā (hasēyā, hadeshāl), I go on the mountain.
 yishā (yiyā, deshāl), I go, walk.
 shiē biyishā, I go in my coat, I wear my coat in going.
 tqayishā, I enter the water, I ford a stream.
 yishāl (niyā, deshāl), I go, walk; t'anf' (danf') yishāl, I foot it.
 tsé'nā' yishāl, I cross a stream.
 shikhē yadī'āgo yishāl, I go on tiptoes.
 adashā (adayā, adadeshāl), I dismount.
 bīnf'tashā (bīnf'tasēyā, bīnf'tadeshāl), I walk or foot it on an impassable road.
 nīldish'āsh (niḥnā'āzh, nīldesh'āsh), I go with you, we leave or go together.
 nīldā'āsh (niḥf'āsh, nīldesh'āsh), or niḥnash'āsh (niḥnshā'āzh, nīndesh'āsh), I accompany you, or niḥnānsht'āsh (niḥnānsht'āzh, nīndesht'āsh), I go with you, for instance, niḥnī'nānsht'āsh, I enter the ground or a mine with you.
 niḥnikhēnsht'āsh (niḥnikhēnsht'āzh', niḥnikhēdesht'āsh), I return home with you.
 niḥchēnsht'āsh, I accompany you outdoors.
 niḥ aldānsht'āsh, I meet you.
 niḥ aqānsht'āsh (niḥ aqansht'āzh, niḥ aqādesht'āsh), I come to an understanding with you.
 nīkyish'āsh (niḥnā'āzh, nīldesh'āsh), I accompany you, I walk with you.
 (niḥ)qanāsh't'āsh (qashisht'āzh, qādesht'āsh), I go up with you.
 nīl'ndesht'āsh (niḥnānsht'āzh, nīl'ndesht'āsh), I return with you.

WALKING AND STEPPING.

dīdis'és (dīdés'ēz, dīdés'is), I step off, I measure with steps.

ndīns'és (ndīns'ēz, ndīdés'is), I step; ndīnshtqāl (ndīnshtqāl, ndīdeshtqāl), I make a step, I walk.

yīs'is (ūs'iz, ndes'is), I walk slowly, noiselessly.

nās'is (ūs'is'iz, ndes'is), I walk about noiselessly.

īyestāf (nt'ē), I walk on tiptoes; naistāf (nt'ē), I walk about on tiptoes; nanshtfīsh (nt'ē), I wriggle; nādīnshkhād (nt'ē), I sway; yishchāl (nt'ē), I bound.

shīlnāhāsyīs (shīlnāhāyīz, shīlnāhōdoyīs), I am perplexed.

qōlnāhāsyīz, he gyrates (in a snow storm).

nanshtfā' (nt'ē), I have a defect, I am awkward in walking.

bā'danahaz'āni, physical defects.

RUNNING.

ishyéd (ishwhūd, idéshwhūl), I run.

tqaltfā'ishyéd, I run in or under the water (rarely and ceremonially); yōishyéd (yoéshwhūd, yōādeswhūl), I run or go away.

ndishyéd (ndíshwhūd, ndīdeswhūl), I run.

adishyéd, (adíshwhūd, ādīdeswhūl), I beat him in running.

nādishyéd, I beat you in running.

azīs bedishyéd (bedéshwhūd, bēdeswhūl), I run a sack race.

nshyéd (śshwhūd, śdeswhūl), I run it down.

ninshyéd, I run you down.

nashyéd (nāshwhūd, śdeswhūl), I run.

nānashyéd, I run again; yaānashyéd, I run in, re-enter.

nāshwhūl (nānshwhūd, śdeswhūl), I run, for instance, hoghāngo nāshwhūl, I run home.

yíshwhūl (śshwhūd, deshwhūl), I run, for instance, ntāji yishwhūl, I run from you; nikhé yishwhūl, I run after you, or bikégi yflāghūl, he runs behind him, or yil'aqā aqinolchél, they run a tie, they run together, he runs with him.

ni'alghādishtāsh (ni'alghādeshtāzh, ni'alghādishtāsh), I run a race with you.

dijād, fleet of foot; dinshjād (nʔé), I am strong on my feet.
 dflāwhó', very fleet; dinshwhó' (nʔé), I am a good runner.
 dā'nshjíd (dā'néshjíd, dā'dfneshjíl), I jump.
 tǎji dā'nshjíd, I jump back.
 nahashchá' (nahisfschá', náhideshchá), I hop.

FINDING.

bikīnshá (bikīniyá, bikídeshá), I find a thing.

Frequently words denoting "picking up" are employed in expressing "to find" an object.

ndish'á (ndf'á, ndidesh'ál), I find a hat, pick it up.

ndishlé (ndíla, ndídeshlél), I find a rope; ndishjá (ndfjá', ndídeshji), I find some corn; ndishtqí (ndftqá, ndídeshtqíl), I find a gun; ndish'níl (ndf'níl, ndídesh'níl), I find several objects; ndishtqé (ndíltqí, ndídeshtqél), I find a horse; yā ndishtqé, I pick lice; ndistsós (ndítsós, ndídestsós), I find a blanket.

Similarly, nádish'á, etc., are used to express finding or picking up again.

qanánishtqá (qananéshqá, qanandfneshqál), I find it again.

nakhánánishtqá, I find you again.

shináhoshé (shinahiséshé', shinaideshtél), I locate it finally.

BRINGING.

yish'ál (ná'á, desh'ál), I bring a box or coin.

qanf' yish'ál, I bring the gossip or news.

yishjá (ńjá', deshji), I bring grain or sugar.

yishlé (ńlá, desh'él), I bring a piece of leather.

yislós (ńlós, deslós), I bring a horse.

yish'ésh (ńf'ēzh, desh'ish), I bring two horses.

yishkhá (nákhá, deshkhál), I bring a liquid.

yishqél (ńiyí, deshqél), I bring or carry anything.

yishtqíl (ńftqá, deshtqíl), I bring a gun.

yishól (ńshód, deshól), I bring a bulky object.

yishjól (ńljól, deshjól), I bring a bundle of hay or wool.

yishtqél (ńltqí, deshtqél), I bring or carry a baby.

yishjfl (ńljfd, deshjfl), I pack anything.

yistsós (ńltsós, destsós), I bring a blanket.

CARRYING.

nash'ál (naná'á, ndesh'ál), I bring or carry a box.

nashjĭ (nanjá', ndeshjĭ), I carry sugar; nashgél (nanshgĭ, ndeshgél), I haul a load.

nashlél (nańla, ndeshlél), I carry leather.

naslós (nańlós, ndeslós), I lead a horse.

nash'ish (nanf'ėzh, ndesh'ish), I lead two horses.

nashkhál (nanákhá, ndeshkhál), I carry a liquid.

nashtqfl (nańtqá, ndeshtqfl), I carry a gun.

nashól (nańshód, ndeshól), I carry a bulky object.

nastsós (nańltsós, ndestsós), I carry a blanket.

nashjól (nańljól, ndeshjól), I carry hay or wool.

nashtqél (nańltqĭ, ndeshtqél), I carry a mutton or beef, or baby.

GIVING.

nansh'á (naná'á, ndesh'ál), I give you a coin.

nanshjá (nanjá', ndeshjĭ), I give you some sugar.

nanshlé (nańla, ndeshlél), I give you a quirt.

nanslós (nańlós, ndeslós), I give you a horse.

nansh'ésh (nanf'ėzh, ndesh'ish), I give you a pair of horses.

nanshnĭ (nańnl, ndeshnĭ), I give you a variety of things.

nanshtqĭ (nańtqá, ndeshtqfl), I give you a gun.

nanstsós (nańltsós, ndestsós), I give you a blanket.

nanshtqé (nańltqĭ, ndeshtqél), I give you a sheep or horse.

Similarly, nanansh'á, etc., I return it to you.

ACQUIRING, HAVING, KEEPING.

nash'á (nasá'á, ndesh'ál), I get a coin in one way or other.

nashjá (nashéjá', ndeshjĭ), I have some grain.

nashlé (naséla, ndeshlél), I possess a quirt.

naslós (nasélós, ndeslós), I get a horse.

nash'esh (nashé'ēzh, ndesh'ish), I have two horses at my disposal.

nashnīl (nasēnīl, ndeshnīl), I acquire several things.

nashtqī (nashēqtā, ndeshqtīl), I possess a gun.

nashtqé (nasēltqī, ndeshqtéi), a horse came into my possession.

nastsós (nasēltsós, ndestsós), I have this blanket.

t'ā nash'ā, etc., expresses I keep it (after acquiring).

ASSORTING, SELECTING, SEPARATING, ETC.

altsāsh'ā (altsā'ā, altsādes'hā), I sort coins.

altsāshjā (altsājā', altsādes'hji), I sort grain.

altsāslōs (altsālōs, altsādeslōs), I separate a horse from a herd.

altsāsh'esh (altsā'ēzh, altsādes'h'ish), I separate a couple of horses.

altsāshkha (altsākhā, altsādes'khā), I pour liquid in either vessel.

altsāshlē (altsāla, altsādes'hlē), I put a whip aside.

altsāshtqī (altsāqtā, altsādes'htqīl), I separate a shovel from others.

altsāshōd (altsāzhōd, altsādes'hōl), I sort pumpkins, select some.

altsāshnīl (altsānīl, altsādes'hnīl), I separate several objects from a number.

altsāstāī (altsāltāī, altsādestāī), I remove a hair or two.

altsāstsós (altsāltsós, altsādestsós), I sort or select a blanket.

altsāshtqé (altsāltqī, altsādes'htqéi), I select a sheep.

altsāshjōl (altsāljōl, altsādes'hjōl), I sort wool.

altsāshkhāī (altsālkhāī, altsādes'khāī), I splice a stick. (Cf. Navaho houses et alibi, for additional words.)

altsāhashjōl (altsāhājōl, altsāides'hjōl), I sort wool.

altsāyish'ā, I assort hats; altsāyishlē, I assort leather. For additional roots and past and future forms cf. biyish'ā, under "Placing."

altsāshnīl (altsānīl, altsādes'hnīl), I put several things apart.

ndash'ā (ndasā'ā, ndades'hā), I set stones apart. Similarly, ndashjā (ndashējā, ndades'hji), grain; ndashlē (ndasēla, ndades'hlē), two ropes; ndashtqī (ndasēqtā, ndades'htqīl), two sticks;

ndashód (**ndashéshód**, **ndadeshóŋ**), melons; **ndashnŋ** (**ndasénŋ**, **ndadeshnŋ**), I scatter, or set several things apart; **ndastsós** (**ndasétsós**, **ndadestsós**), I put blankets apart; **ndashtqé** (**ndaséltqf**, **ndadeshtqél**), I drive two sheep from a herd.

PLACING.

nnsh'á (**nná'á**, **ndesh'ál**), I place a coin.

nnshjá (**nújá'**, **ndeshji**), I place grain.

nnshkhá (**nnákhá**, **ndeshkhál**), I place a vessel with liquid.

nnshlé (**núla**, **ndeshléŋ**), I place a rope.

nnslós (**núlös**, **ndeslós**), I lead a horse to a place.

nnish'ésh (**nnf'ézh**, **ndesh'ish**), I lead two horses.

nnshnŋ (**núŋ**, **ndeshnŋ**), I place several objects.

nnshtqé (**núltqf**, **ndeshtqél**), I place a beef.

nnstsós (**núŋtsós**, **ndestsós**), I place a blanket.

The above are similarly qualified as follows:

chinnshhtqé, etc., I put a horse out, eject it.

nlá'di nnshtqé, I lead it yonder.

nájf, or **ná'di nnsstsós**, I put a blanket away, etc.

bí'nash'á (**bí'ná'á**, **bí'ndesh'ál**), I place a stone in a box or wagon.

bí'naslós (**bí'nálös**, **bí'ndeslós**), I lead a horse into a stable.

bí'nash'ésh (**bí'ná'ézh**, **bí'ndesh'ish**), I put two horses into a stable.

bí'nashjá (**bí'nájá'**, **bí'ndeshji**), I put sugar into a sack.

bí'nashlé (**bí'nála**, **bí'ndeshléŋ**), I put the quirt into a box.

bí'nashgyé (**bí'náshgf**, **bí'ndeshgél**), I carry it into the room.

bí'nashtqf (**bí'nátqá**, **bí'ndeshtqŋ**), I carry a stick into the wagon.

bí'nashnŋ (**bí'náshnŋ**, **bí'ndeshnŋ**), I place several things into it.

bíyish'á (**bíyf'á**, **bídes'h'ál**), I place a stone into a box.

bíyishlé (**bíyfla**, **bídes'hléŋ**), I place a strap into a box.

bíyishjá (**bíyfiá'**, **bídes'hji**), I place grain into a sack.

bíyishtqf (**bíyftqá**, **bídeshtqŋ**), I put a gun into a box.

bíyislós (**bíyflös**, **bídeslós**), I lead a horse into a field or stable.

bīyish'ēsh (bīy'ēzh, bīdesh'ish), I lead two horses.

bīyishnīl (bīy'nīl, bīdeshnīl), I place several things into a box.

bīyistsōs (bīy'īstsōs, bīdestsōs), I put a blanket into a sack.

bīyishjōl (bīy'ījōl, bīdeshjōl), I sack wool.

bīyishtqé (bīy'īltqf, bīdeshtqél), I put a mutton into a sack.

bīhishjōl (bīqéljōl, bīhidēshjōl), I sack wool or hay.

lēyish'á, and other forms, express placing in the ground, burying leather, sticks, grain, blankets, etc.

REMOVING, TAKING OUT, EXTRACTING.

bikinash'á (bikiná'á, bikīndesh'ál), I take a stone out of a wagon.

For various other forms see bī'nash'á, placing into a receptacle.

ghānshtá (ghānsh'tá, ghādesht'ál), I remove a box, take it away.

ghānshdlé (ghānshdlá, ghādeshdlél), I remove a quirt.

ghānshjá (ghānshjá', ghādeshti), I take the grain away.

ghānshtqf (ghānsh'tqá, ghādeshtqíl), I remove a gun.

ghānshgyé (ghānshgtf, ghādeshtgél), I remove a sack of wool.

ghānsh'nīl (ghānsh'nīl, ghādesht'nīl), I remove a variety of objects.

ghānshtqé (ghānsh'tqf, ghādeshtqél), I take a horse away.

ghānshjōl (ghānshjōl, ghādeshtjōl), I remove a bale of hay.

ghānstsōs (ghānstsōs, ghādestsōs), I remove a blanket.

shicīá' naqoish'á (naqo'tá, naqoādesht'ál), I take my hat off.

qash'á (qá'á, qadesht'ál), I dig a stone out.

shawhó qash'á, I extract a tooth.

qashjá (qajá', qadeshti), I take or dig out grain.

qashkhá (qakhá, qadeshtkhál), I draw water.

qashlós (qalós, qadeshtlós), I lead a horse from a field.

qash'ēsh (qa'ēzh, qadesht'ish), I lead two horses.

qashnīl (qanīl, qadeshtnīl), I take several things out of.

qashj (qaji, qadeshti), I take sugar from a bowl.

qashlé (qala, qadeshtlé), I take a saddle from a wagon.

qash'tqf (qatqá, qadeshtqíl), I dig a post out.

qash'nīsh (qānīsh, qadesht'nīsh), I pluck weeds or feathers.

qashgyéd (qágyēd, qadeshgöl), I dig a ditch.

qastsós (qátsós, qadestsós), I take a blanket out of a room.

qastál (qátsál, qadestsál), I pull a hair out.

qashtqé (qáltqí, qadeshtqél), I take a horse from a corral.

tqo qahashlé (tqo qaháló', tqo qahidéshlő), I draw or pump water.

lēsh qahashgyéd (qahágyēd, qáhideshgöl), I excavate, remove the dirt.

qahastsós (qahátsós, qahidestsós), I take a blanket from a wagon.

qahashjöl (qahájöl, qahidéshjöl), I carry hay or wool from a house.

(Cf. also Redeeming from Pawn, under "Borrowing.")

INVERTING.

nahidesh'á (nahidé'á, nahididesh'ál), I turn a coin over.

nahideshjá (nahidéjá', náhidideshjál), I turn grain over.

nahideshlé (nahidéla, nahidideshlél), I turn leather over.

nahideshníl (nahidénil, nahidideshníl), I invert several objects.

nahideshtqí (nahidé tqá, nahidideshtqíl), I turn a shovel over.

nahideshtqé (nahidéltqí, nahidideshtqél), I turn a horse or beef on its side.

nahideshqé (nahidéyí, nahidideshqél), I turn a large sack of wool over.

nahidesht'é' (nahidélt'é', nahididesht'éél), I turn a mutton over.

nahidestsós (nahidétsós, nahididestsós), I turn a blanket up.

SUSPENDING.

dahidish'á (dahidí'á, dahididesh'ál), I hang up a saddle.

dahidishjá (dahidíjá', dahidideshjál), I hang up some sugar.

dahidishlé (dahidíla, dahidideshlél), I hang up a rope.

dahidishtqí (dahidí tqá, dahidideshtqíl), I hang up a gun.

dahidishqé (dahidíyí, dahidideshqél), I hang up a sack of hay.

dahidishníl (dahidíníl, dahidideshníl), I hang up several things.

dahidish'té' (dahidílt'è', dahidídesht'éł), I hang up a mutton.
 dahidistsós (dahidíłtsós, dahidídestsós), I hang up a blanket.
 dahidishtqé (dahidíłtqí, dahidídeshtqéł), I hang up a beef.

LOSING.

yōish'á (yō'fá, yóádesht'áł), I lose a coin.
 yōishłós (yō'flós, yóádeshtłós), I lose a horse.
 yōish'ésh (yō'fēzh, yóádesht'ish), I lose a pair of horses.
 yōishlé (yō'ila, yóádeshtléł), I lose a rope.
 yōishjá (yō'fjá', yóádeshtjíl), I lose some sugar.
 yōishtqí (yō'ftqá, yóádeshtqíł), I lose a shovel or gun.
 yōishníl (yō'fníl, yóádeshtníl), I lose several things.
 yoishtqé (yō'łtqí, yóadeshtqéł), I lose a sheep.
 yōistsós (yō'łtsós, yóádestsós), I lose a blanket.
 yoishtné' (yō'fłné', yóadesht'níl), I lose an article.
 yoishtéł (yō'fłdél, yóádeshtéł), I dropped and lost something.
 yōisht'é' (yō'fłt'é', yóádesht'éł), I lose or get rid of something.

CLIMBING, CRAWLING, CREEPING.

yish'ná (ńsh'ná, desh'ná), I crawl, creep.

báyish'ná (báńsh'ná, bádesht'ná), I climb up.

Similarly other words are formed: tsé'ná' yish'ná, I climb or creep across something; bitsłgi yish'ná, I crawl along the base of it; bitqátá' yish'ná, I creep along a projecting shelf of a mountain or precipice; biyági, or bitłá'gi yish'ná, I crawl under it.

bátqis yish'né (yish'ná, desh'ná), I climb over.

ádanash'né (adanášh'ná, adadésh'ná), I climb down.

(tsín) bánash'ná (bansłs'ná, bandesh'ná), I climb a tree.

CLOSING.

shłla ńshjól (néłjól, dńeshjól), or shłla ńsmás (néłmás, dńes-más), I close my hand or fist.

shłla alchłf' ishłé (ishłla, adeshłł), I close my hand.

Similarly, náłtsós alchłf' ishłé, I close a book or letter.

nishchĭl (nishchĭl, dĭneshchĭl), or nĕshchĭl (nĕś), I close my eyes, I squint.

dādĭsh'nōd (dādĭsh'nōd, dādĭdesh'nōl), I close my lips.

qādĭshbĭn (qadĕlĭbĭn, qādĭdeshbĭl), I close an opening, fill it.

dāndĭnshtĭn (dandiŋltĭn, dandĭdeshtĭl), I close a wall, dam an opening.

dāndĭnshjĕ (dandĭnĭjĕ, dāndĭdeshjĕ'), I close a corral (with logs).

dāndĭnshkhāl (dandĭnĭkhāl, dāndĭdeshkhāl), I close a door, or dāndĭnsh'nĭl (dandĭnsh'nĭl, dāndĭdesh'nĭl), I close several.

ndĭzĭdgo (ndĕzĭd, ndĭdozĭl), at the close of the month.

altso nāqāgo, at the close of the year, or yĭqā (yĭqai, doqā), it is the close of the year. (Cf. also close of ceremony.)

nishkōl (nĕshkōl, dĭneshkōl), I wink.

adish'nĭ (nĕś), I close my eyes.

LOCKING AND CO-RELATIVE WORDS.

yĭnstśāg (nĕś), I cling or hold to it with my teeth.

sōtsāg (nĕś), it (a dog, for instance,) clings to me with its teeth.

shĭdĭnĭtsā' (shĭdĭnestsā', shĭdĭnōtsā'), or shĭdĭnĭlaghāsh (shĭdĭneshghāsh, shĭdĭnolaghāsh), it clings with its teeth, sinks its teeth into my flesh.

shĭdĭnĭjĭ' (shĭdĭneshjĭ', shĭdĭnōjĭ'), it sinks its claws into me.

de' aqĭdĭlĭd (nĕś), they locked horns.

hashtĭsh hōdĭljĕ (nĕś), mud (rosin, glue, etc.) clings, or hash-tĭsh hōdĭlĭd, it clings fast.

tsĕsō, glass, or akhāl bōtōd, leather clings (when moistened and held to stone or glass).

aqĭdĭljĕ, or bĭdĭljĕ, it holds fast, it is welded or glued together.

hōdzĭznĭ' (squeeze), he clinched it.

yĭnstśā' (nĕś), or yĭtsśā' (sĕtsā', destśā'), I cling to it, hold an object with my teeth.

dādĭsh'nōd (dādĭsh'nōd, dādĭdesh'nōl), or dādĭnsh'nōd (nĕś), I hold it with my lips.

dādĭtsśā' (dādĕtsśā', dādĭdestśā'), I clinch my teeth.

BREAKING AND CO-RELATIVE WORDS.

KínshtqI (**kíntqI**, **kídeshtqI**), I break a stick or wagon.

altsánshtqI, I break it into.

díshqtá (**díltqá'**, **dídeshtqá**), I break it up, break it to pieces, shatter it.

dítqá (**dítqá'**, **dídotqá**), it is burst, broken.

ńtńńf (**ńtńńf**, **ńtńdonf**), it is in fragments.

díshdó (**dékdó**, **dídeshdóI**), I burst or explode it (for instance, a gun or bladder).

deadó, it is burst (it exploded).

yístǎf (**séltǎf**, **destǎf**), I break a pot or glass.

sítǎf, it is broken (a plate, saucer, and the like).

qishtód (**qéťód**, **qídeshtód**), I break it off, such as a piece of dough, wet paper, and the like; **dítódi**, fragile, easily broken or torn, such as wet paper, chalk, etc.

do-ńtńzda, it is not hard, but soft and breakable.

aqínáldás, it fell in, such as a house or wagon.

baghánldás, the ice broke through.

keéldó (**geéldó**, or **keéltqó**), **kídokdóI**, it is broken, it will break.

yíshdó' (**séldó'**, **deshdó'**), I burst a bottle; **yíldó'** (**yísdó'**, **doldó'**), it is burst.

nádiltǎf (**nádiltǎf**, **nádíldoltǎf**), the mud breaks off, or **nádiltqál** (**nádiltqál**, **nádíldoltqál**), the (dried) mud falls from the wheels.

nádighá' (**nadíyá**, **nádídogál**), a horse or dog breaks away.

ń yishó (**yízhód**, **deshóI**), I break or tame a horse.

SPILLING.

yanákhád, it is spilt.

yandokháI, it will be spilt (from a small vessel).

yánildzíd (**yándoltǎf**), it is spilt (from a jar).

wó'áldás, it is spilt; **wóádoldás**, it will spill (by shaking).

ya'ishkhá (**ya'íkhá**, **yaideshkháI**), I spill it, I empty a vessel.

yash'á (**yá'á**, **yeidesh'ál**), I pour off.

yaszíd (**yeizíd**, **yeidesf**), I pour out.

STRIKING.

nansbqāl (nānēlqāl, ndfneshbqāl), I strike him with a club.

nanshné' (nanēlné' ndfneshnfl), I strike him with a stone.

nanúshqāl, I strike you with a club.

nanúshné', I strike you with a stone.

nanstsqīs (nanēltsqās, ndfnestsqīs), I whip him.

nanústsqīs, I whip you.

nandfshqāl (nandflqāl, nándfideshqāl), I club you.

nandishné' (nandflné', nandfideshnfl), I stone you, or strike you with a stone.

nandfstēin (nandflstēin, nandfdestēil), I strike you with my fist.

nandfstsqās (nandfltsqās, nándfdestsqīs), I give you a whipping.

nikhindishé' (nikhindēlté', nikhndfideshtéil), I floor you.

niłdsidfstēin (niłdsidēltsēin, niłdsidfdestēil), I punch you.

nikhīdishgō (nikhidégō', nikhīdīdēshgō'), I strike the ground in falling.

lējishné' (lēdsflné', lēshdeshnfl), I strike the ground with a hard object.

naābidsfstēin (naābidsfltsēin, naābīzdestēil), I prostrate him with my fist.

naābijfshqāl (naābidsflqāl, naābīzhdesbqāl), I prostrate him with a club.

nnāgha ajīshkhād (adsfkhād, azhdeshkhāl), I strike you once across the back, or when done with frequency, nnāgha ajīshkhād (adsiyēkhād, azhdiyēshkhāl), I strike you several times across the back. Similarly, the following are formed: ntsfya ajīshkhād, I strike the back of your head; njā ʿa'ajīshkhād, I box your ears for you.

ajishgyé (adsfgō', ázhdesbgyō'), I ram with my head, butt another with my head.

adistsél (adētsēl, ādīdestēil), I strike (the moccasin).

yinstsél (yinfstēl, yidestsēil), I strike it.

yisó (sézō, desó), I strike a match.

tlél yishkhał (sēkhāl, deshkhāl), I strike a flint or match.

yishtqál (sétqál, deshtqál), I kick it; adishtqál (adsiyétqál, ázhdiyeshtqál), I give it a kick; ájishtqál (adsftqál, ázhdeshtqál), I give it several kicks; nishtqál (nsétqál, ndeshtqál), I kick you; nanshtqál (nanétqál, ndfneshtqál), I kick it again; nannshhtqál, I kick you again.

sísqé (sélqf, diyesqél), I kill it.

TEARING, DESTROYING, ETC.

iszós (izöz, adeszós), I tear.

yiszós (ízöz, deszós), I tear it; ba yiszós, I husk corn.

yishchó (yflichó, deshchól), I destroy or spoil it, or hashchó (hólchó, hodeshchól), I destroy it.

nehesóz (nehézöz, nihideszóz), I tear a cord.

nehesqás (nehégház, nfhidesqás), I crumble it with my hands.

Kínishnîsh (Kínîzh, Kfdeshnîsh), I tear a rope.

do-naha'náda, it is immovable, you can not budge it.

isdílád, it is riven; baghándlád, rent into, torn; Kíndlád, a cord is torn; nehest'ód, it is in shreds (for instance, a coat).

tqáosh'nîl (tqaisénîl, tqaidesh'nîl), I tear it down, destroy it.

tqánáosh'nîl (tqaneisés'nîl, tqaneidesh'nîl), I tear it down again.

SICKNESS AND DISEASE.

Sickness, disease and corporal injuries are treated in the light of chastisement by the offended divinities. The source of sickness is therefor to be found not so much in any physical cause as in some magic influence, which must be removed by the power of a specific chant by making a propitiatory sacrifice to the offended holy person, or by employing the greater power of a higher divinity in removing the witchery and malevolent influence of an inferior one. Should the sickness continue after a given ceremony, such a fact can not be attributed to the impotence of that ceremony, but clearly shows that the offense has not been properly traced and must be sought elsewhere. In consequence there is often no end of singing in one form or

other until death ensues or relief is obtained, as the method of dispatching a chronic patient by means of poisonous herbs or drugs is now practiced with ever decreasing frequency. Death is, of course, beyond human calculation, yet should ordinarily not interfere with an effort to obtain a prolongation of the period of life by invoking the aid of some chant. When the approach of death is certain, however, every ceremony subsides, and the officiating singer withdraws before the inevitable issue.

Withal, the singer is the man of medicine, as Navaho therapeutics are effectively applied in the course of the rites only. Logically, too, the knowledge and specialty of the singer is gauged, not so much by his familiarity with the sanative qualities of herbs, as by his greater or lesser knowledge and dexterity in performing a given rite. In fact, when it is known that his medicine pouch is possessed of paraphernalia of some antiquity and difficult to acquire at present, or when others have been cured of a similar disease through his services, the demand for a given rite and singer becomes greater regardless of the disease. That the suffering of some patients, especially when rich in wealth, is unduly prolonged through the chicanery and greed of a clique of singers bent on their exploitation, is unhappily true, but scarcely avoidable in the face of an equally general credulity. And though the uninterrupted continuation of singing is usually productive of physical exhaustion and high fever, this fact can little be considered when the chant is all-important. Moreover, a glance at the list of harmless herbs and the manner of applying them in most ceremonies lends color to the opinion that medicines are of very minor and secondary importance throughout. In addition, too, medicines obtained from American physicians do not deprive the ceremony of its primary importance and inherent power, and are often taken while a ceremony is in progress, or subsequently to it, without apparent detriment to its success.

Obviously, then, the subject of disease is intimately connected

with that of religion and the chants through which a remedy is sought. The present chapter, however, is devoted to diseases and afflictions regardless of their religious character. A list of popular remedies frequently applied independently of a ceremony is also added, though many of these are no longer in vogue. Regarding the native recipes for poisonous snake bites, hydrophobia, or similar cases, nothing of value could be obtained, as such information is the property of a chosen few who scrupulously safeguard it even from their own tribesmen, and would divulge it with extreme reluctance.

The contagiousness of some diseases is well known. Thus smallpox is much dreaded, the patient being hastily deserted in the hogan and locality infected with the disease. In recent years few cases of it have occurred. Diphtheria, too, was checked by close quarantine no other remedy being known. Modern diseases, such as pulmonary and tubercular troubles, though formerly unknown, are now very prevalent, and words have been coined to describe them.

While surgery is not practiced the Navaho readily submits to the surgeon's knife when the necessity for it is explained.

The singer as a rule does not act as accoucheur, but assists sometimes in supporting the laboring woman. Immediate assistance is offered by neighboring female friends of a woman in confinement, and obstetrics as a specialty is unknown.

daátsá, he is sick, or bedridden.

nálnf, a disease, or germ of disease.

náldsíd, or *náldsíd nasdlf*, decay has set in, it is incurable.

tsítqábá, dandruff.

sítsítsín dínf, my head aches, headache.

biná dínf, sore eyes; *dínf* or *hodínf* and *nesgáí* are often used to express local afflictions, thus, *hachf' dínf*, a sore nose; *jéyí'* (*shijáyí'*) *hodínf*, earache; *habíd dínf*, pain of the stomach, etc.

biná ádini, a blind man; *bijékhaí*, deafness.

aná ílchósh, a sty, or pimple on the eye.

clīsh is sometimes used for catarrh; nēdlī, nose bleeding, or shinēēdlī, my nose bleeds.

shijé iqés, my ear is scabby, pus is settled on my ear; shijéyī' hāqés, I have a running ear.

whō dinf, toothache. Similarly, adáyī' hodinf, a sore throat; sizénaghá, or sokhós dinf, my neck pains me; sitsó, (my tongue and throat); shinītsf, (my cheek); shinīshjā, (my cheekbone); shiyátsln dinf, my jaw aches; showhótsf dinf, or hodinf, my gums ache.

diskhós (nté), I cough, have a cold, but more frequently, dokhós shidīlné (shidolná, shídídólná), I catch a cold.

bizábá, or shidá' nasdlád, my lips are (torn) chapped, or shidá' aqidóltqál, my lip is burst on the whole surface, or shidá' istqál when burst in center only. Similar expressions are used for chapped skin on the hands; shflá' nasdlád and shflá' aqidóltqál, chapped hands.

binádigls, cross-eyed; binálchī, his eyes are bloodshot, though this idea is usually paraphrased.

SPECIAL DISEASES.

ayádinī, diphtheria; ayayá dahazlf, goitre, which occurs rarely. yānaháskhād, the planting of lice, the ringworm.

khādagūni, the smallpox, for which lōdtso, big sores, is also used.

lōd donádsīhi, an incurable sore, the cancer; lōd, or bilōd, a sore, an inflammation.

cháchōsh, syphilis, shanker.

bilfzh bō'nī', stricture.

lichigoqá' hadajéigi, red spots appearing, the chickenpox and measles.

ishchfd, or qūishchfd, the itch (a prostitutional disease).

hatqáhodigyés, the body is curved, apoplexy, paralysis.

nānchād, swelling, dropsy (?).

jei ádin, no lungs, is used by some for pneumonia or pulmonary troubles.

dīdeshchī, or dādeschchī, blood poisoning.

agīsi, the gout, rheumatism. This is also expressed by chōyīn (chōyīni), menstruation, as the touch of a menstruous woman is said to cause stiffness and the hunchback. Hence, the three words are identical, chōyīn, menstruation; chōyīni, a hunchback; chōyīni, rheumatism, a stiff back.

GENERAL INDISPOSITION.

ntqāsh dohatsīda? does your body ache? what ails you?

shitqā do-hatsīda, I feel bad, I am slightly indisposed, or shitqā dooqālyāda, I have no feeling in my body, I am not sick, yet not well.

tqāhunīgai, or shitqāhonesgai, I have a fever; akīneshtā (nt'ā), I am indisposed; akīnetā, he is feeling bad.

nāsō', I am stiff (from work); nēlsō', I am sore, my muscles ache; tēnīdō', he is very sick. Usually reference is made to incurable diseases, as lichī tēnīdō', sick with smallpox; hayayā dīnīgo, diphtheria; but occasionally, also, dokhōs tēnīdō', a severe cold; hatqāhonīga, a raging fever, etc.; tēnīdō' shī bisqī, he probably died of fever. Hence, the expression, do-dsōsbā'da, death is inevitable, is applicable to all of the diseases just mentioned, with the exception of tqāhonīgā, fever.

saghās naha'nā', my esophagus palpitates.

jaf dītsā', palpitation of the heart; jaf dīnī, heartburn.

ilkhō', vomiting; nāshkhūi (nākhūi, nēshkhō'), I vomit.

jfdini, he is hurt (lying).

shilnāhodaghā (shilnāhodeyā), I am giddy, dizzy.

disē (dezā, dīdesā), I belch, gastritis.

shīdīlchā', food is repulsive to me, nausea.

shichā shā'ē'nī', I am constipated.

sītānālyōl, or nānsōl, I am flatulent; chā'ishtīd, the colic; chādīl, I pass blood, or sītānalchī, I have painful diarrhœa, or shichā shaghānlī, I pass water. Hence, shizhf dīnf, my whole body pains, and shibfd, my stomach; shichf, my bowels; shilfz dīnf, my urine aches, diuretic trouble.

do-ishqázhdá, I can not sleep, insomnia.

díl st'é', boiling blood, blood spitting, or htsóí, yellow, from the color of the phlegm.

ayí' dédí, a hemorrhage; dí sháháí (nt'sé), I am bleeding; dí t'éyá, he is covered with blood; dí qúisqí, he bled to death.

hatsá tqídíl'í, a pain in the abdomen.

tqídajiná', impaired vitality, indisposition, which may be caused by a fall from a horse, wounds, bruises, weariness, soreness, etc.

bádaqo'á', an accident; hí nashílgó', the horse threw me; hí sístqál, the horse kicked me.

nílkí (neskí, dfnolkí), a clot of blood.

síd, a scar; sēs, a mole; náetsa, a pimple; náachí, small pimples covering the entire arm or body.

chózh, or ilchózh, a boil; tqúdisól, a blister; tqóiltqá, a tumor or blood blister; ishtísh, an abscess; Iqés, itching.

ditsqíz, a shiver, trembling.

danátsa, or danátsáhi, fits or spasms; ná'icháhi is also used for this, but particularly expresses insanity or mental derangement due to intermarriage of close relatives. It is said to be characterized by attempts to plunge into the fire after the manner of a moth (icháhi), from which the term is borrowed.

qís, the pus; qís istqál, an open sore; qís qáí, an open leg.

nánshqúd, I limp; aneshqúl, I limp slightly.

káyí' hókáni, bowlegged; jád hókhalí, knockkneed.

shlá' tsfhíldás (tsfhildás, tsfdoldás), my hand is bruised.

Similar expressions are: shlá' tsfhítód (tsfhítód, tsfdotód), the skin is peeled, or tsfhishchíd (tsfhíchíd, tsfdeshchíd), I scratched my hand, or shlá' tsfhishkí (tsfhíki, tsfdeshkí), for a long bruise, or shlá' tsfhisqás (tsfhíghás, tsfdesqás), the skin is rasped (as from a bite). Cf. also hashílkíd, I was scratched; naséldás, I am bruised or skinned; tsfíághás, I rasped or bruised the flesh.

nsédlád, I am bruised (from riding); shitá yisí, I lost my buttocks, is figurative for the same idea.

aqánishiná'á, a cramp; **shflá'**, or **shikhé digyēs**, a cramp in the hand or foot; **áqishkáksh**, I sprain my ankle.

haké ilchf', he has nightmare; **hatsá yajftqi**, he speaks in his sleep.

adfskhes (**adeskhás**, **ádideskhös**), I choke; **adölkhás**, it will choke me.

ndfsdsí, I gasp, breathe; **hání ásdíd**, he is unconscious.

adsísdín, he is breathless, *ausgespielt*.

yisdá' yínldsí (**nt'é**), his lungs are good, long-winded; **yisdá' nsín** (**nt'é**), out of breath, or **yisdá' nanógö'**, his breath failed him.

yisdá' nanshgö' (**nanéögö'**, **ndfneshgö'**), my breath fails me.

yisdá' nísí (**nizí**, **dínésí**), or **qáhidishqí** (**nt'é**), gaping, breath fails me; **yisdá' qóyē** (**nt'é**), it is very close (in a room), or sultry.

tsístqín (**nt'é**), unsound, broken-winded; also used of a horse.

yíní bílqé (**bisqí**, **bídiyolqél**), he died broken-hearted.

dochöhojída, he is nearing his end.

bakháji hazí, he had a close call (from sickness or accident).

shikháji hazí, I had a close call.

násdsí (**násdsí**, **ndesdsí**), I am recovering (my wound is recovering).

bí' quneshlgo, startled as a deer, nervous and alarmed person.

atsá qá'él, premature birth; **atsástqín**, an abortive.

esdzán ajírchígo, a woman in confinement.

khéwhös, a bunion; **khébá ntíizgo dá'naznfligi**, corns.

shikhé shírchí, my feet smart; **shikhé ní'él**, my feet perspire.

hadátés, inflammation between the toes, or below the arms.

shikhé hádásté', my feet are mushy and soft, or **khé dfkôsh**, sour feet, malodorous, or **khéíchün**, bad smelling feet.

shijád nesgaf, or **shijád díní**, my legs are sore; **dodinshjáda**, I am not a good pedestrian, am weak in the legs.

Rözh, saline (from **doközh**, alkaline), excessive perspiration below the arm leaving its mark on the shirt.

APPLIED TO SURGERY.

álkíthonishgés, I dissect, cut open.

hatqágojishgísh, amputated limbs; **hagán**, (arm); **hálá'**, (the hand); **hajád kishnfgízh**, the leg, etc., was amputated.

hatqágo hadsístód, all his limbs were pulled out, or hagán dsísqāl, the arm is clubbed off; hagán dsístqí, the arm is struck off; hagán jishné', the arm is cut off (with a knife).

do-qūshozindalá, or do-qūshosízd Itáda, or do-qūshodsosíd jítáda, he is mutilated beyond recognition.

REMEDIES.

baāqashyā (baāqashyānt'æ), I take (or took) care of a sick.
bísēldá' yisdá, I remain with a sick person.

Dandruff (tsítqába) is said to be removed by the application of red juniper (gād ní'éhí) and a grass called t'ólé', which are rubbed well in after bathing the hand. It will be remembered that the hairbrush (beēzhó) is provided with a branchlet of the juniper (gād ní'éhí), presumably as protection from evil influence.

Snuff (nī't'nŋ) was largely used for headache and nose trouble (cŋish azé, catarrh medicine, and hachí dínfji azé, sore nose medicine). Some plant names indicate this purpose.

For headache a snuff prepared from a Gentian (ínízd chŋl) was said to afford some relief. For nose troubles dried and pulverized herbs were used, such as blue eye grass (aze t'óhi), the Zinnia (nī't'nŋ ntsáigi), and another called nī't'nŋ tso, tall snuff, or the aster, and the silkweed (t'ŋish ildéi tsós), and Apoplappus (t'ŋish ilawhói), and the Solanum (náłtsú), which latter was also a remedy for sore eyes (nā dínfgo azé).

Earache medicine (jéyí hodínf azé) was prepared from the pulp of a tree (tsísdísi) found in the San Francisco Mountains, which was pulverized and mixed with water (tqahikhágo, powder in water) and small quantities dripped into the ear.

Deafness was said to be partially relieved by burning balls of tree rosin (jēsā) on hot embers, allowing the fumes to pass into the ear. A kind of stone rosin (tsé' bijékhā) was applied in the same manner.

Toothache medicine (whó azé) consisted of a mush prepared from crushed leaves of alum root (whotsíni azé) and hastéł-tsí (!) and Apoplappus (třish ilawhóí) mixed with water. The mush was held to the aching tooth with a heated stone (awhó' bídñildó', the tooth is heated). As alum root was also chewed to relieve the sore gums it was called whotsíni azé, tooth-gum medicine.

No remedy was known for the measles, smallpox or diphtheria.

Blood poisoning is cured with a poultice prepared from a plant known as ndochf (!) and placed on the swelling (dideshchf azé, blood poisoning medicine).

Medicine for the itch (dishclífd azé) is made of gágé baká', crows' fat, with which the skin is well rubbed.

Pimples (náetsá) were removed by rubbing them with the leaves of a plant called náetsá azé, pimple medicine.

A liniment made of the leaves and branchlets of the cancer root (lédól'ází) was employed for sores in general (lödgi azé, sore or boil cure).

Diuretic troubles (halfzh dinígi azé) were removed by a beverage prepared from such plants as Whitlow grass (alfzh beidzól), or the hummingbird food (dahitqřhidá tsós), or the "weed which kills (chíl agháni)."

Swellings (nánehád) were removed by applying the plant of this name, *Thellipodium Wrightii* (nánehád aze).

Syphilis was supposedly removed by a beverage (yidlá) of syphilis medicine, *Cordylanthus ramosus* (cháčlısh azé) and the buttercup (hétso iljá'ě), which were powdered and taken in water every morning.

The gout tonic (agfsi azé) was a beverage made from the crushed leaves and branchlets of the *Gaillardia pinnatifolia* (tsis'ná'dá), added to lukewarm water, and applied internally and externally.

Rheumatic stiffness was cured by a tonic (choyñi azé) boiled from the leaves and branchlets of the barberry (tsīyā oléčhīl), or *Corydalis aurea* (hasbīdida).

Medicine for bronchial and troubles of the esophagus (aghās azé) was found in a tea made of the crushed and boiled leaves of *Oxytropis* (debé haichīdi ntsāigi).

Blood spitting (dīl sī'é' or hīsōi azé), was relieved with the leaves of white sage (gā'tsodā), which were slightly boiled, adding a pinch of salt to the concoction.

Mormon tea (tīō' azé) was used for stomach troubles in general (habīd dīñji azé). Other herbs used as a remedy in similar cases were: ndīyñi nlēhñi (*Verbesina enceloides*), dahitqñhidā (*Gilia attenuata*), dahitqñhidātsō and dahitqñhidā labé'igi (painted cup), chīl abé' (milkweed), and nī'tññ tsōs (*Townsendia strigosa*). The usual method was to crush the dried leaves between the fingers and stir them in a bowl of water.

Pain in the abdomen caused by colds, loose bowels, or lifting a heavy weight, was removed by a special preparation (hatsā tqīdīñgo azé, medicine for pains in the abdomen) made from unidentified herbs, nī'tsōsi, nī'tsōsitso and aya'al.

A universal tonic or remedy is designated as "life medicine," and is still largely applied in cases of indisposition or "impaired vitality" (tqīdajīnā'). A provision of this life medicine (qinā aze, or ināji azé) is usually kept in stock, and carried on journeys for eventual use. The stem and leaves of various herbs are gathered in their season and dried, in which condition the medicine is called azé tsīn, medicine twigs.

In the event of their use a small handful is crushed with the fingers, mixed in water, and applied internally and externally (tqahitsédgo yidlā, crushed and taken with water). The life medicine is usually taken independently of (and previously to applying for) the chant. Foreign drugs are treated much in the same manner and are often designated as such. Some of the herbs designated as life medicine are herewith subjoined.

The milk vetch (azē dilqīl), sensitive brier (azētšōs ntsāigi and labā'igi), also azē lakhān, and azē hāldzīd (of the Compositæ), and milfoil (azē iltsaf), and plumed thistle (azē hokhānitso), and the sow thistle (azē hokhāni labā'igi), and a kind of sagebrush (azē ndōgaf), and the cudweed (azē disōs), and the rayless golden rod (azēwhō'), and a crucifer (azē qāgai), and the false wallflower (azētso), and the bladderpod (azētšōs), and the pennycress (azētšōs altsāigi), and the rockcress (azē labā'igi), and the cress or Gentian (azē dotfīsh), and false mallow (azē ntīfni), and goosegrass (azē ntīfnitso), and the Eriogonum (azē nī'baghāntī'), and Eriogonum alatum (lē azē), and white medicine (azē lagai), and red medicine (azē lichf), and thick medicine (azē dītī'), and ayā'af (?), and azē bijfchihīgi, which is also used at childbirth, and the evening primrose (azē sēsī'), and another primrose (azē litsō), and *Gaura parviflora* (azē sākhāz), and a geranium (azē qinā), and the willow herb (chīl lātqā ātsōs), and evening primrose (tīyīgāi labā'igi), and the stoneseed gromwell (azē nānesdizitsōs), and meadow rue (tqāzhi nchfn), and the *Mentzelias* (iltīfni and iltīfnitsōe), and yarrow (hazafitsēi), and the aster (chīl nīlqfnigi), and *Frasera* (chīl behētīl litsōigi, and chīl behētīl nnēzigi), and *Asclepiodora decumbens* (jādīldēi), and cattail flag (tqēl), and flag (tqēl bitī lānigi), and sagebrush (tseēzhf'), and others.

Spurge is chewed and used as a liniment for pimples, hence its name, nāchf azē, pimple medicine.

Similarly, for boils (chōzh azē), a remedy is found in the shape of a liniment (betlō) made of such plants as the *Euphorbia* (khētsf halchī) and azē behētsf halchf.

A remedy for vomiting (īlkhōgi azē) is found in the rubber plant (nēēshjā īlkhēi) and the broad-leaved medicine (azē ntqēli), the leaves of which were pulverized and added to water (itsēdgo tqasākhāgo jīdlā). The lather (tqālawhūsh) of the broad leaf just mentioned is said to relieve heartburn (jai dīnfgo azē).

Medicines for confinement (esdzān alchfhiigi azē) consist of bev-

erages prepared from plants called awé biyalaf yilbézh (which boils the placenta), or ayán bilfzh hálchfn, and slender milkweed (chíl abé' altsósigi), for purging. Birth medicines (ajilchf' azé), of which there are several: watercress (tqalkhá dahikhál) is used as a tonic after deliverance; silkweed (dō-bichijilchf', preventing birth) is used for that purpose; greasewoods or sagebrush (tsá' and tsétqátsá') aid deliverance; Townsendia (azé náoltqádi, of which there are several kinds) accelerate deliverance.

A remedy for alarm and nervousness (bf'quneshlgo bichf' azé, also called nīdzfji, corral medicine) is made of New Jersey tea (bf'dá, or diné'ē' chíl), and of Colombo (bfhijái), which are applied both internally and externally.

Corns are ordinarily removed with a knife. A liniment made of wormwood sagebrush (tqúikhál) is sometimes spread over the wound.

A foot ease was prepared from a plant known as azé dishóigi, which was applied to the foot in the shape of a liniment and placed in the moccasin to remove the bad odor. In recent years some seek a remedy for bad-smelling feet in the warm sheep manure. Immediately after removing the paunch from the slaughtered sheep the feet are placed into the manure until it has cooled off. This, if repeated two or three times, is said to effectively remove all sweating and bad odor from the feet. A liniment made of cocklebur (altqánatséhi) was held in the armpit to remove excessive perspiration (kōzh azé ádá'ashné, I hold the medicine in the armpit).

To remove the effects from the bite of a spider a tea was prepared from the bladderpod (nashjéidā labá'igi). The effects from swallowing a spider were removed by the spider medicine (nashjéi azé), which was prepared with Ambronia fragrans (kīnædlfshidá). When ants were swallowed a medicine (woláchf bichf' azé) was prepared from the inner bark (bitqátáhi) of Findlera rupicola (tsiftfīz), which was pounded to a pulp, mixed with water, and

taken internally. The sting of ants (woláchf ishíshgo azē) was treated by chewing dodgeweed (tsíldílyísi), or greasewood (du-wúzhilbas), and placing the pulp on the swelling caused by the sting of an ant, bee or wasp. Wolachí begá, antidote for ants, was used to a similar advantage. The plants called í'nelnéji chíl and í'ní'gi chíl are applied internally and externally in cases of a stroke by lightning, or the bite of a snake.

Some Words Referring to the Preparation of Medicine.

azē hanshtqá, I am looking for a medicine; chíshanshtqá, I did not find it; azē ishílé, I am preparing a medicine; azē áda-áshlé, I mix a preparation.

azē sétlō, a liniment; azē iká (ikán), a powder.

azē istáld (yítséd), I pound or crush medicine; azē ishká', I grind, pulverize it; azē dínishqísh, I crush it between my fingers; or, bitá, or bilátqá'í dínishqísh, I crush the leaves and flower of an herb; azē tqáishkhá, I put it in water. Grinding and stirring in water is ordinarily expressed by one word, as tqahitsédgo, pounded on a stone and added to water, or tqahikhágo, the meal or powder added to water (tqasákhágo, after the powder has been added).

azē ádá'áshné, I prepare medicine for my personal use.

azē adishné, I prepare it for myself and others.

azē ishdlá, I drink the medicine, take it internally.

azē adéshtlō, I apply it externally; ishtlá', I anoint or rub.

binábín, an antidote; azē ídínildō', a poultice.

azē shínf' ē'ēshnfl, I snuff a medicine.

Words Referring to Persons, Places, Animals and Plants.

NAMES OF PERSONS.

Persons are designated as follows:

awé', a baby, infant; shi awé', my child.

ashkhí, a boy; (pl. shikhé, or ashikhé, boys).

átéd, a girl; (pl. átédkhe or átékhe, girls).

álchíni, children; sha'álchíni, my children; ba'álchíni, his children.

tsíłkhé, or dzíłkhé (plural probably tsíłkhé), a youth, young man; diné, a young man.

jíłkhé (pl. jíłkhé), a maiden.

diné', a person, a man.

hastqín, a man, a husband; bahastqín, her husband.

asdzáni, or esdzán, a woman, wife; beésdzá, his wife; ba'ád, his wife, is less frequently used, though it occurs in composite words, such as ba'ákhe łáni, polygamous.

hastqúi, the old folk, old men; sháhastqúi, my ancestors or tutors, the old men of my lineage, those with whom I take counsel.

sáni, the old women.

khá ádini, a virgin, an unmarried girl. This expression is also used in designating a widow, just as ba'ád ádini designates a widower. A better expression is bizhá naghá, one who is alone, hence, a widow and a widower. Professed bachelors are unknown to the Navaho.

ákís, a friend; síkís, my friend; síkísó! my friends!

PRONOUNS.

shI, I; nI, thou; bi, he and him; niqI, we and you (two); daniqI, we and you (more than two); bi, they (two); dabI, they (more than two).

PERSONAL NAMES.

In some families the uncle of a boy is invited to give his nephew a name, which is usually suggestive of war. Still a goodly number are indifferent to this custom, the parents naming the child as they would, and while warlike names for children are not infrequent, especially for girls, we now meet with such epithets as the fat or fine boy, the red or nice girl, etc. No special festivity, however, accompanies the naming of a child, which is a purely private affair.

Some maintain that the war name is in reality a secret name known only to closer relatives and never divulged to outsiders. An occasion for its use is had at the blackening during the war dance, at which the name of the patient is proclaimed and inserted into the songs celebrating his victory. It is learnt previously from the relatives of the patient, and changed only in the event of an identity of names of patient and herald. Others attach no importance whatever to this name, which is given by the family in distinction from the better known name given by acquaintances and friends at first opportunity. At any rate the name of early childhood is usually superseded by some sobriquet invented to suit the habits or physical peculiarities of the individual.

Patronymics, or family appellations, are not in use, the nearest approach being names of children retaining the parent's name owing to some distinction of the latter. It is not uncommon, however, to refer to a person as the son of so and so, or the daughter of the late so and so, in addition to some other name which, perchance, is not equally well known. This is especially true of women whose name, being property of the family circle, is not readily and properly exposed to outsiders, and who are,

therefor, as a matter of decorum, ordinarily referred to as the daughter of Mr N. N., or after marriage, as the wife of this or that man.

Navaho decorum does not permit of addressing a person by his name, or of disclosing it upon direct inquiry. The address is made in terms of familiarity, such as my friend, my brother, grandfather, my daughter, and the like, while the name of a person is learnt from others. Custom varies with regard to disclosing another's name in his presence, some being averse to information of this kind given within hearing of the party concerned.

The following presents a partial list of the personal names of children, of men, and of women, to which, as a matter of record, the names of early distinguished chiefs have been added. This is followed by a list of names given to Mexicans, Pueblos and American residents.

NAMES OF BOYS.

Boys are given names suggestive of war, such as the chief, the speaker, the warrior.

naʔai yił yigál (*naʔaiyigál*), the chief or speaker who walks in addressing them.

naʔá yiłyáłtqi, the speaker addressing them.

hashkél nadál, he returns with the warrior.

hashkhél yigál, the warrior walks while addressing others.

ba yił chíniyá, he is bent on war.

ba yił naiyá, he went out to war (again).

Frequently other descriptive adjectives are added, as *hashkhé yázhe*, the little warrior; *naʔá tsósi*, the slender speaker; *naʔá tso*, the large speaker; *naʔá næs*, the tall speaker; *naʔáłchī*, the red speaker, etc. *ashkhi hozhóni*, the beautiful boy; *ashkhi neská*, the fat boy; *ashkhí dijól*, the round boy; *ashkhiłchī*, the red boy; *ashkhi biná dotłfzhi*, blue-eyed boy; *tsósi*, the slender one; *tsíłbáhi*, roan hair, or some similar sobriquet.

NAMES OF GIRLS.

Names of girls are, with few exceptions, commemorative of war. Even now, in peaceful times, the custom of indicating some feature of war by the name given to girls is generally followed.

bāzhnábāi, she came to him in war.

alkinábāi, she met war (born on the battlefield).

yiné' násbā, she surrounded the country with war.

yitqānábā, she mixed in war.

yilnábā, she arrived with a war.

nānábā, returns with war, or war returned with her.

dezbā, going to war.

dóbā, there was no war.

kēl nábā, a mild war.

yildézbā, they went to war with her.

yanábā, she meets the enemy.

alnábā, wars passed each other (war raged in two places and opposite directions).

nadlī nábā, the chieftainess of war.

nadlī seems to be an equivalent for queen or chieftainess, hence, *nadlī tēōsi*, the slender queen; *nadlī yázhe*, small queen; *nadlī ba*, the girl queen; *nadlī'ichī*, the red chieftainess; *nadlī hābā'*, the gray queen; or *nadlī* is also used with the above names: *nadlī yildezbā*, the queen with whom they went to war; *nadlī nanábā*, the chieftainess with whom war returned; *nadlī nāzbā*, who was surrounded with war, etc.

It is not unusual to find two names for one person. Thus, in addition to the above, *esdzan tso*, the large woman; *esdzān nēz*, the tall woman, or *at'éd yázhe*, the small girl, etc.

NAMES OF MEN.

Names for men are suggested by some physical distinction or defect. The word *hastqín* which is often prefixed corresponds to our "Mister."

hastqín yázhe, Mr Small, or the small man; hastqín tso, Mr Large, or the large man; hastqín nās, or snās, Mr Long, or the tall man; hastqín altsósi, Mr Slender; hastqín altsísi, or altsíhi, Mr Little; hastqín díl, Mr Heavy or Fat, the heavy-set man; hastqín zhín, Mr Black; hastqín sgáhi, Mr Dried; hastqín ltsoi, Mr Yellow; hastqín ltsoi tsósi, Mr Yellow Slender (Mariano).

diné' yázhe, the small man; diné' hízhi, the black man; diné' altsísin, the late little man; diné' chíli, the chunky or dwarfy man; diné' tsósi, the slender man; diné' lagaini bitsóí, the late white Navaho's nephew; diné' ayúí, the nice man.

jāni, John; chāla tso, Big Charley.

tsíishchíli, Curly Hair; tsíishchíli tso, Big Curly; tsíishchíli tsósi, Slim Curly; tsíishbízhi, Plaited Hair; bitsí híchí, Red Hair; bitsílgai, or bitsíghalagai, White Hair; tsí litsoi, Yellow Hair; tsí tsósi, Slender, Sparse Hair; tsíchóshi (chíchóshi), Stubby Hair; tqági litsoi, yellow hair hanging over forehead; tqági litsoini biyé', the son of the late yellow hair on forehead; bitsiyáí ntsáí, he with the large queue.

binā ádini, the blind one; binákíis, the one-eyed one.

biní ádini, he with little or no sense.

dághanāz, the long mustache; dághalbai, the gray mustache; dágha hāni, or bidágha hānigi, he with the full or heavy mustache; dágha yázhe, the small or thin mustache; dághadasakhád, whose mustache stands in clusters; bidágha ndāsqéligi, who has a dark mustache.

tāa, the left-handed one; tākā yázhe, the little lefty; tāa tso, the big lefty.

nānlqūdi, he who limps.

khē yistqíni, he with the frozen feet.

khēshgūli, clubfooted; khe gūdi, short-footed.

hastqín bogūdi, Mr Kneecap (he with the defective knee).

gūāgūdi, he with the short arm (having lost the forearm).

bílā āgūdi, the fingerless one; chōyíni, the hunchback; doyál-tqí'í, the dumb one; bijékhāl, or hastqín bijékhāl, the deaf one;

bowhógizhi, he who lost a tooth; whósin, the late "shoulder" (Lomo); chózh ádini, he without the calf (of the leg); jád sházhi, knotty legs; gíshi, or hastqín gíshi, the man using a cane; gíshinbiyé', son of the late gíshi; gish neitqíni, he who carries the cane; ashkhístíni (yistíni), the freckled boy; tqóli (nitqóli), clear or crystal color (of the eyes).

Occupation and trade are additional sources of names.

adakhái, the gambler; yóadakhái, the gambler with beads.

adiáíli, the gambler at the stick game; adildóni, the shooter or marksman, or naaltóí, the arrow shooter.

adilgáshi yázhe, the little witch, or bean shooter; hatqáli yázhe, the little singer; hatqálihígai, the white singer; hatqáli tso, the large singer; hatqáli nádloi, the laughing singer; hatqáli næs, the long or tall singer; hatqálinæs bináli, the uncle of the tall singer; hastqín chúi, Mr Ugly (probably meaning chanter for witchcraft).

nátáni, the chief; nátáni tsósi, the slender chief; dícháli, he who speaks often.

béshlagai, or béshlagai il'ni, the silversmith; béshlagai il'ni altsósigi, the slender silversmith.

atsidi sáni, the old blacksmith, who was also named besh il'ni, the man working in iron. He is reputed to be the first blacksmith of the tribe (Sp. Herrero).

atsidi yázhini' biyé', the son of the late little blacksmith.

tqáyoni', the kneader (baker); ba il'ni, the baker (of bread).

atsidi biyé', the smith's son.

hastqín ditáí, Mr Interpreter (the interpreter, both of English and Spanish).

hastqín nalzhéhé, Mr Hunter; nalzhéhé tso, the tall hunter; nalzhéhé næs, the long hunter; nalzhéhi tsósi, the slim hunter.

Some names indicate the possessions or habits of the bearer, such as riding a particularly colored horse. They also allude to some special incident which occasioned the name.

ashkhí bilf Mni, the boy (man) with many horses; bilf hízhi, black horse (he who rides a); bilf daalbaf (bilfílbai), roan horse (the owner of roan horses); bilf kikhízi, pinto or spotted horse.

hastqín bégáshi, Mr Cow; hastqín hashkán, Mr Hashkán (yucca syrup); debé hízhi, black sheep; tífzi tso, big goat; tífzi Mni, many goats; tífzilgaf, white goat; tífzi dághálgai, white-bearded goat.

jíshinbidá', the nephew of the late man with the medicine pouch.
wúdabizhé'è', the father of wudy.

ná'nil Mni, numerous slaves.

bisléni biyé', the son of him who wears leggings.

hashkhé yázhe, the little warrior.

hastqín hashkhébe, the scolding man.

diné' yiyisqíni, he who killed a Navaho.

belagána yiyisqíni, he who killed an American.

tíó' tsaf, he who lives near this weed (or large grass [?]).

hastqín dflághúshi, Mr Howler.

hastqín dflághúshin bitsói, the grandchild (nephew) of the late Mr Howler.

cháhi, the man with the hat.

hashkhé tqádeyá, who seeks war.

níkákói, wounded face.

ndishbá'ni biyé', the son of the late warrior, also called ashkhí dilághói, the fleet boy.

ná'ishíshi, he who was stung.

dlād (?). nályíshi (?).

The names of the clan to which one belongs are often adopted. Tribal names indicate the descent of the bearer. See gentile system.

tqáchíni, "red water people," or tqáchíni tso, the big tqáchíni.

tqábáha, "on the shores," a tqábáha.

honaghá'ni nās, the tall honaghani.

tqótsóni biyé', the son of a tqótsóni (big water).

tsfnājīni, a member of this clan (the standing charred or black-streaked tree).

nakhaf dinə'ə', Mexican clan.

khīn lichni tso, the big red house (clan).

dzil tlāni, crevice or cañon in the mountain.

chīshi, the Chiricahua.

nashgāli, the Mescalero.

naəshə'ezhi biyé', the Zuni boy.

tlīzi hāni, many goats.

tqodicīni tsōsi, the slender tqodicīni (bitter water man).

NAMES OF DISTINGUISHED CHIEFS AND WARRIORS.

hastqīn nābahi, the man of (constant) war.

natālēl, the orator ("he who will speak"), who was also called **hastqīn khe ntsāi**, Mr Big Feet (Sp. *sarcillo largo*, large earrings).

hastqīn nātānin, the late Mr Chief (Narbona).

tqaqānān bādāni, the son-in-law of the late Texan (Manuelito). The universal respect in which he was held is shown in his other name, **ashkhi diyfni**, the holy boy.

kākēin, the late wounded by an arrow (Cayetanito), brother of Manuelito.

chā' dītlōi, plushy hat (another brother of Manuelito).

bisēnde, chief Vincent.

bitsō yeyāltqī'i, the stammerer, Guanamuncho, who was also known as **tqōtsōni hastqīn**, the tqōtsōni man.

chīnā', or **tqōtsōni hastqīn bidā'**, the nephew of Guanamuncho (Chino).

bidāghai, the bearded one, or **hashkhéicīi' dāhīlāwhō**, who hurries to war (Barboncito).

gīshdīlīdnī', the late man whose cane burnt (Armijo).

māsīn, the late māsī (Tomás [?]).

bié lizhni, black shirt or garment (Mariano Martinez).

dīwākhān (meaning unknown), Chapaton.

h neinfhi, who distributes horses.

li neinfhin biyé', the son of the late distributor of horses (Chiquito).

blla náyiskháli, whose fingers were shot away.

hashkhé naldiltqni, the warrior who grabs the enemy (in a charge).

nagé neitqni, the shield carrier, who uses the shield well.

khásini biyé', the son of the late "tender falling stick."

bilf dotfzhi, blue horses and his brother, bilf daalzhi, black horses, both of whom were killed on the same day.

Jesus Albrizzo, the official interpreter for the Navaho signing the treaty with the United States Government at Fort Sumner in 1868, gives the names of those Navaho chiefs as follows:

Barboncito, achídhilawhó, who hurries (to war).

Armijo, gish díldín, the late burnt cane.

Delgarito, chíchósh næz, long chancre.

Manuelito, tqaqánán bádání, the son-in-law of the late Texan.

Largo, bogúd bijá, ears in his knees (because he frequently put his head between his knees).

Herrero viejo, atsídi sáni, the aged blacksmith.

Chiquito, chíá' láni, many hats or head bands.

Muerto de hombre, dichín bíqéhe, dieing with hunger.

Hombro, hastqín bowhósin, Mr Shoulders.

Narbona segundo (?).

Guanamuncho, tqótsóni bilf láni, the tqótsóni (his clan), with the many horses.

NAMES OF AMERICAN RESIDENTS.

American residents and traders are usually given a descriptive name after a brief residence.

nātsóho, the man with big eyes.

béshbowhoi, iron tooth (who has gold-filled teeth).

nakhai sáni, the old Mexican.

nfxhæznfli (nākhæāznfli), the man wearing glasses.

dághalchí, the red mustache.

nakhai yázhe, the little Mexican (American speaking Spanish).

kös nãz, the long neck.

ba i'fni tso, the big baker.

atsfdi, the blacksmith.

khegúdi, short-foot.

bflá' kikhízhí, spotted hand (tattooed).

chíshqál, club nose.

níhizhíhi, the sawyer or carpenter.

naltsós i'fni, the clerk; naltsós nãs, the tall clerk.

nātāni, the agent; nātāni snãs, the tall agent.

besh biã, the iron shirt (worn by early Texas rangers).

hastqín nãs, the tall man; hastqín lbaf, the gray suit man;

hastqín hoshkédi, the squaw man.

azé i'fni, the doctor.

ednishódi (ændeishódi, who drag the dress), priests and ministers. They are also given individual names, such as the large, the small, the tall, etc.

esdzáni, or belagána esdzáni, American women (slender, tall, large, etc.

TRIBAL NAMES.

The intercourse of the Navaho with other tribes was very limited.

dzilghá, the White Mountain Apache, who were also called tsástqísi, shins.

chíshi, the Chiricahua.

gwayáli, the sleepy one, Geronimo, the Apache.

hí tšisil, he who checks his horse, Victorio, the Apache chief.

nashgáli, or mashgáli, the Mescalero.

bæqaf, the Jicarilla.

nakétłai (flatfooted enemies), the Pima. This name is also applied to the Yaquis of Mexico.

nódā'ā, the Ute.

báyodzín, the Paiute.

dílzháa, the Yavapai.

goqníni, the Coconino.

nā́ Mni, many enemies, the Comanche.

kháwa, the Kiowa.

diné', the Navaho, also Nawehó, or nawehó ínlzhíni, Navaho Indians; or, goyóde (probably corruption of Spanish coyote).

khís'áni, the Pueblo Indians (general name).

má'ideshgízhni, the coyote pass people, the Jemez.

khínlíhíni, the red house people, the San Juan.

tqogá'ni, the Cochiti.

nā́tqóho (aná), enemies at the water, the Isleta.

tqówhúł, the Taos.

tqó Mni, much water people, the Laguna.

debé lizhíni, the San Felipe (black sheep people).

tłógi, the Zia.

tqo hajilóni, people who draw water, the Santo Domingo.

khín łagafni, white house people, the Sandia.

kísh chínt'i, a line of alder (strung out), the Pajuate.

naasht'ézhi (blackened enemies), or zhúni, the Zuñi; cháyo'áli, the scarabee, a noted Zuñi chief of some sixty years ago.

áyakhíni, people of underground houses, the Hopi, who were also designated in terms showing genuine contempt for them, as mógi (monkey), Moqui; tséest'é iyáni, paper-bread eaters; hon-ígał iyáni, hominy or stew eaters; bichái shijéi, who live in dung; bitłá, bedísdóni, spanned (taut) buttocks; bilfzh yetqádi-gísi, who wash with urine; bitsf bitqágígúdi, who wear short hair in front.

The Oraibis were named ozał.

nakhai lizhíni, a black Mexican, or nfyíli, the negro.

nakhaf, the Mexican (general name). They were also called nakhai diyíni, the holy Mexicans (ironically); or nakhai doda-tsaída, who do not die, the immortal Mexicans; or ba ditłógi, fluffy bread; or nakhai ditłógi, hairy or plushy Mexicans, or tsíbala, shawls. Names like nakhai tso, the big Mexican, and nakhai

sil, the steaming Mexican, and nakhai kākēi, wounded, and nakhai diāde, the sparkling Mexican, are presumably names of individuals.

gāmali, or māmali, Mormons.

bichā' nnāzi, long hats, or the old Mexicans.

The old Texas rangers came in for the following names:

besb bié, iron shirts, or tsaqāna (Sp. tejana), or akhāl bistlēi, leather leggings.

belagāna, the general name for Americans. Other designations were beshfya, baqāna (Texans), nasliyāni, probably corrupted from the Spanish; nādotfzhi, who have blue eyes, which was the Zufi name for Americans.

The following are descriptive of the first or early American soldiers:

bijā yēnjāi, who sleep on their ears; nāgo dildōni, who shoot from the side; bogūd dokāli, who burn their kneecaps (at the fire); shābidilchf, sunburnt, and tqāji ndes'āi, whose forehead protrudes, so called from the shape of the cap.

WORDS.

tāyisi nfzhi' qaf Inlyé'? what is your real name? (referring to the name given by the family).

yfzhi ishlé (ishh, ideshh), I give it a name, I name a child.

qailābā? whose daughter is she?; or qailā bichā', or bitsf? whose daughter?

yinshyé' (ntæ), I am called so and so; qatfsh olyé? what does it signify? what is it called?

NAMES OF PLACES.

The geographical knowledge of the Navaho is practically limited to his immediate surroundings. Local names, therefore, designate places in or around the Navaho country.

A butte, peak or a projecting point in a mountain and mesa is frequently suggestive of a name for a locality.

dziłnáodili, Huerfano.

dziłnáodili chłli, (small) Huerfanito.

tsélgishi, rock pass, Angel's Peak.

dzilditłóí, stubby mountain, Black Mountain (near Red Lake).

tsézhini, black rock (near Fort Defiance).

tsétqǎ', in or between the rocks, the Haystacks (though, too, the head of a cañon, or a group of lone-standing, isolated rocks, are called *tsétqǎ'*).

má'itqo tsétqǎ, Coyote Spring in the cañon (of Black Mountain).

tselchdahaskháni, red round rock, of which there are several.

A locality on the north side of the *lúkachúgai* mountains is generally meant.

tsenakháni, the lone round rock, Roundrock.

błsdotłis des'áhi, blue adobe point, near Roundrock store.

błsdahitsó, two yellow adobes, Two Gray Hills (Crozier, N. M.)

tséálchłi' nágai, the white rocks meet, place about eighteen miles northwest of Two Gray Hills.

tsé bidáhi, the winged rock, Shiprock (peak).

tsélagai dez'á', white rock point, Bluff City, Utah.

tsénajin, black peak, Cabezón, N. M.

dolión, or *yá'nılzhın*, Los Torreones.

tsénashchłi, the red round rock, Hunter's Point.

chézhın dez'á', malpais point, St. Johns, Ariz.

nánzhōzh (*nánızhōzh*), bridged, Gallup, N. M.

nı haldzis, a basin or cavity by natural formation, Bule's Park.

saı étsósi, the pointed or conical sand dune.

tsé' étsósi (*tséhetsósi*), the pointed or conical rock.

Springs and bodies of water, often far between, are distinctive landmarks, and are sometimes indicated by meadows, old ruins, or trees and plants thriving in the vicinity of water.

abá'tqo, last water, Willow and Deer Springs, Ariz.

chā binā tqo, beaver's eye spring.

chítqo, red clay spring, Emigrant Springs, Ariz.

duwhúzhíbitqo, greasewood water.

dzil tqo binās'áhi, water around the point of a mountain.

haltsó, the meadow, San Mateo, N. M.

tsóhotso, the big meadow, Cienega, now St. Michael's, Ariz.

kai sá'aní, willow mat, Tanner Springs, Ariz.

káijinéltfó, braided willows, La Jara, N. M.

lúka ntqél, wide reeds, Ganado, Ariz. Some render this
lúka khíntqél, the wide ruins in the reeds.

lúkadeshjín, ashy reeds, Keam's Cañon, Ariz.

lúkanāgai, lone white reeds, a spring at Hunter's Point.

má'itqó, coyote's water, Houck's Tank, Ariz.

nāzlaētqó, gopher's water, Nacimientto, N. M.

nātqó sáikai, Grants, N. M., which is also called besh dádikhāl,
the closed iron door (probably Old Fort Wingate, near San
Rafael, N. M.)

nādákā kédilyédi, where they plant cotton, Moencopie Wash.

sán bitqó, the old man's water, or nōdā'ā bitqó, Utes' river,
the San Juan River.

nakhai bitqó, river of the Mexicans, or semítqó, the Rio Grande.

The Rio Grande is tqo bá'áde, female river, the Rio San Juan,
tqo bakhá'ē, male river.

shāsh bitqó, bear spring, Fort Wingate, N. M.

tqāhótqél, where the water spreads, Largo, N. M.

tqāhótqél nlni, Cañon Largo.

tsíd bitqó, glowing coals' spring, thirty-five miles west of
Nacimientto.

tsíd bitqó bokhói, coal spring cañon, Cañon Blanco, N. M.,
also called tsébáálgai, white rock edge.

tqóqtá', between rivers, Farmington, N. M.

tqo díchlí, bitter water, spring between Cabezon and Cañon Bonito, N. M.

t'is násbá', warpath cottonwoods, near Four Corners.

t'is ndeshgísh, forked cottonwoods, near Two Gray Hills, Cottonwood Wash.

tqó dokózh, salt spring, Sulphur Springs at Bennet's Peak.

Salt springs, of which there are several, are also designated by tqó dokózh.

t'is ntsa chélf', it flows toward a large cottonwood, Bluewater, N. M.

tséktstqóhe, spring in the crevice of a rock, Cubero, N. M.

t'isyakhín or t'isyá, houses below cottonwoods, Holbrook, Ariz.

t'is násbás, cottonwood circle, Bosque Redondo, N. M.

húéldi (Sp. fuerte or huerte, fort), Fort Sumner, N. M.

tqósédó', hot spring, Navajo Springs, Ariz., and San Rafael, N. M.

tqélehlínt'í, a line of tulips or flag iris, Oak Springs.

tqél sákhád, cluster of flag iris, Gallegos Cañon.

tsíná'él dasá'á, at the boat, Lee's Ferry.

tqolchíkhó', red water cañon, Little Colorado River.

dzil labai bokhó', gray mountain cañon (at the junction of the Little Colorado and San Juan rivers), Grand Cañon.

tqo nánésdísí, tangled waters, Tuba City, Ariz.

tqo náneshzhē, fringed water (Black Mountain district).

tqo tsósi, slim water, Concho, Ariz.

tqúnhtélli, crystal water flows out, Crystal, N. M.

tsé'ilí' (tséyí' ilí'), it flows into the cañon (de Chelley), Tsehili country.

chílní', it flows out, the mouth of Cañon de Chelley, Chinlee, Ariz.

tqótsó, the big spring, on the south side of the Lukachukai.

t'is biyági, under the cottonwoods at Chinlee.

t'isyá láni, under a cottonwood grove.

yóttqó, bead water, Santa Fé, N. M.

oljéto, moon spring, Oljeto, Utah.

násíítqē, Rio Puerco of New Mexico.

khíntqéldē nílni, which flows from the wide ruin (Aztec, N. M.), the Animas River.

tsédōgói nílni, flowing by the projecting rock (butte), the La Plata River.

khíntqél, wide ruins near Pueblo Bonito, another near Manuelito, and also on the Colorado Wash.

tsíyí' khíntqél, the wide ruins in the woods, a place south of Gallup.

chíłchín bitqó, or Kíłchín bitqó, Sumach Spring in the Black Mountains.

chéčhíłzhi tqó, rough rock spring.

lō qálf, fish spring.

shá' tqói, sunny or south spring, several springs on the south side of various mountains.

náázlíní, the crooked spring, between Ganado and Chinlee.

hasbídi tqo, turtledove spring.

jáditqó, antelope spring, Jettyto Spring.

tsághánl', the water flows through the rock (Black Mountain district).

Other names are descriptive of local peculiarities and otherwise.

gád sákhád tsétqá', a cluster of junipers in the cañon, McCarthy's, N. M.

tlóchíni, wild onions (which were numerous at), Ramah, N. M.

tlóchín náholyé, which is also called wild onions, Gallo, N. M.

tqójiłhúidzō, which plant was plentiful there, Woodruff, Ariz.

áqoyoltéld, a tank of water, Jacob's Well.

khín nááná's, the walled house, ruin built across a cañon, Box S Ranch.

bés sēnıl, stacked rails, Winslow, Ariz.

dlésh ndígai, almogen point, Allantown, Ariz.

khín hóchó'ó', the ugly house, Manuelito, N. M.

khín Mni, many houses, Durango, or other towns in the vicinity of the Navaho country.

khīn māni dōkōōshīd biyāgi, many houses below the San Francisco Mountains.

bēēldīl dāsēnīl, at the place of the peals (bells), Albuquerque, N. M.

bokhōhodotīsh, Blue Cañon.

tsébiyāhani'āhi, a wall below a projecting rock, Pueblo Bonito.

tséyī', in the cañon, Cañon de Chelley.

tséyī', in the rocks (near Cabezón).

ānē'ē' tséyī', the rear cañon, Cañon del Muerto.

tsfhidzo bihilī', the flow of the fluted rock, Monument Cañon.

tsin beekhīni, wood houses.

tqāyidelzha (?)

gīni bi'ō', hawk's nest.

dēl nāzīni, standing cranes, both places in the vicinity of the San Juan River.

tséyā chahalqēl nīfni, which flows along "darkness under the rock," Chaco Wash and Valley.

tsēhotso, meadow in the cañon, Fort Defiance, Ariz.

tsētqā' cīīnlīnigi, the mouth of any cañon, where water flows out; tqē, a valley or puerco.

tsētsīltsō (chēchīltsō), the big oak.

sō' sēlā', the twin stars, starlike buttes, Washington Pass.

tīsbaf bitqo, cottonwood spring (Black Mountain district).

bitsfhūitsōs, a knoll at the base (of Black Mountain).

tsēāwæ, the baby rock, a small, lone pinnacle.

tsē ābēdi, at the milk rock.

tsāhotsoi biyāzhe, small cañon meadow, near Marsh Pass.

tqo ādīn daāzkhā, the waterless peak.

In Cañon de Chelley: tsē ntqēl, broad rock; jāābāni, the bat (pillar); tqo sākhā, pool of water.

tqē ndē, where they fall into the pit of water. The place of this name in the Black Mountain region was formed by the fall of water, and was formerly a much frequented watering place for game. The smooth surface of the abruptly descending walls of this pit offered no sufficient foothold, but entrapped the game

much after the fashion of the early native pit traps.

tqō danastqāni, or tqō dahastqāni, where the water is dammed.

tqō bidādestfīn, where the water is walled up.

NAMES OF THE NEIGHBORING PUEBLOS.

The names of the neighboring pueblos are of long standing.

Áyakhīni, people of the kiva or underground houses, the Hopi pueblos. The individual pueblos are named as follows:

East Mesa Villages: nāshāshi, the bear people, Hano; atqá' khīni, the people of the middle houses, Sichomovi; Áyakhīni (presumably nfyá'khīni), people of the kiva, Walpi.

tqālahoghan is possibly identical with the destroyed village of Awátobi, while adégi khīni, the people of the houses yonder, near adégi tqō, yonder spring, designates an extinct village one mile south of Hano.

Middle Mesa Villages: tsétsokīd, the hill of boulders, Mashongnovi; khftāli, meaning, probably, the houses in ruins, or houses resembling ruins, Shumopovi; khīnāztī', the houses strung out in a line, Shipaulovi.

Western Mesa Village: ozaf, Oraibi. Some suggest a derivation from ōd zaf, numerous eagle traps (?).

ozaf biyázhe, little Oraibi, Moencopie. To this should be added, nādákā kēdilyēdi, the cottonfields, Moencopie Wash.

ha'ko'nī, people of Acoma.

tqo hāni, much water, Laguna.

tqo hāni biyázhe, the offspring of much water, Acomita.

tqo hajilō', they draw water, Santo Domingo.

saf behoghān, sand houses, San Felipe.

tqógā', Cochiti.

tīōgi, Zia.

khīn nodōzi, striped houses, Bernalillo.

tqo hajilēhe (?)

khīn lagaf, white house, Sandia; khīn lagaf is also used for Navaho station.

khln lichf, red house, San Juan.
 tqówhül, running or swift water (?), Taos.
 nātqóho, enemies at the water, Isleta.
 má'ideshgízh, coyote pass, Jemez.
 kishchínt'í, line of alder, Pajuate.
 kishjín, black alder (?), Cebolleta.
 nāsh'tézhí, blackened enemies, Zúñi.
 tséhoghán, Thunder Mountain.
 tsédodón, two peaks southeast of Zúñi.

NAMES OF MOUNTAIN RANGES.

Names are also given to the neighboring mountain ranges.

chúshgai (chóshgai), white spruce, Chusca Range.

tqúntsa, large water, Tunicha Range.

lūkāchūgai, which is rendered by some as the reeds at the white spruce, Lukachukai Mountains. These three are names of one and the same range.

dzil náózli, the mountain surrounded by mountains, Carriso Mountains.

dzilMjín, the black streak mountain, Black Mountains.

nādsis'án, the enemies' hiding hole, Navajo Mountains.

In addition, a mountain is sacred to each of the cardinal points. sísnañín, (woman's) standing black belt, Pelado Peak, north of Jemez pueblo. This is the sacred mountain of the east.

tsódzil, mountain tongue, Mount Taylor of the south.

dóókoskíd, San Francisco Mountains of the west.

debéntsa, large sheep, San Juan Mountains of the north.

Other sacred mountains are the Carriso (dzilnáózli), and the Huerfano (dzilnáódli), and chíl'í (?), and dzil esdzá, the mountain woman (?).

The mountain of the east, sísnañín, Pelado Peak, is also called yolgaídzil, or the white bead mountain, and its color is white.

That of the south, tsódzil, Mount Taylor, is yódot'fzhidzil, the blue bead (turquoise) mountain, and its color is blue.

That of the west, *dóókóskíd*, San Francisco Mountains, is designated as *dichhídzil*, haliotis mountain, with the color of yellow.

The mountain of the north, *debéntsa*, San Juan Mountains, is the *báshzhínidzil*, or cannelcoal mountain, and its color is black.

dzhínáódíli, Huerfano, is *ntíis dzil*, or mountain of precious stones.

chól'í is *yóóidzil*, mountain of variegated beads. The latter two mountains are probably the mountains of the upper and lower directions (*yá' ální* and *ní' ální*, middle of heaven and earth, zenith and nadir), the color of which is either *tseich'í*, redstone (red), or *altqás'af*, varicolored.

The sacred mountains were brought from the lower worlds and placed in their respective positions by First Man. The mountains of the east, south, west and north also figure in various sand paintings, which they surround in their respective positions and colors.

The two last mentioned mountains, *dsihnáodíli* and *chól'í*, the latter of which is probably only legendary, do not figure in the sand paintings, but in songs and prayers. This is especially the case in the *hacháyátqéi*, prayer to the divinities, which usually begin from the summit of one of the sacred mountains.

WORDS.

baghádi, or *hokádi*, on the mountain; *baghádsé*, from the mountain; *dzil bilátqádi*, for instance, *chól'í bilátqádi*, on the summit of the mountain; *bitsídi*, or *bitsíji*, at the base of the mountain; *biné'di*, or *biné'ji*, in the rear of the mountain; *biné'go*, to the rear of the mountain.

The locality from or toward which one travels is indicated by means of prepositions affixed to the name of the place, thus the affix "go" corresponds to our to, *yótqógo deyá*, I am going to Santa Fé; *tsáhotsogo deshál*, I shall go to Fort Defiance; *tséyí'go nséyá*, I was at the Cañon (de Chelley); *tqógo iyá*, he went to the river (meaning any of the larger bodies of water).

The affix *ji* is used similarly; *khín hochōji*, towards Manuelito. *dæ* corresponds to our *from*, *nánzhōzhdæ*, from Gallup.

di indicates in or at a place, *shash bitqódi*, at or in Fort Wingate.

qágolá, or *qázosh diniyá*? whither are you going? *qágosh nsíniyá*? where have you been?

qádish nikhéya, or *qádish naghán*? where is your home or house?

qadæshá', or *qadæsh ntí'*? whence do you come? *nízādæ*, from afar off.

kád nikhíniyá, I return now, I return home; *kád nikhédeshdál*, I will return or go home presently.

tqúntqél bilá'di, or *bilá'go*, over the ocean, indicates every country and city beyond the ocean. Similarly, *tqúntqél bilá'dæ*, from beyond the ocean.

wáshíndón, or *yéshíndón*, Washington, is sometimes used to designate other cities, and also as a distinctive landmark, thus, *washíndón bilá'di*, *yushjishgi* (*yushchíshgi*), beyond or this side of Washington.

Cities like Chicago, St. Louis and Los Angeles, which have been visited by some, also cover many unknown localities.

NAMES OF ANIMALS.

Animals are classified as follows:

naáldlóshgi, which walk on fours, quadrupeds.

ná'ná' (*ndaha'ná'*), they creep, the lizzards, the reptiles, to which is added, *ná'ná' naldlóshdo*, which creep and walk.

tqáyí' *náldéi*, or *tqaltfānāldéi*, which inhabit the water, water animals.

This latter group also embraces fishes of which few varieties are differentiated. This is probably due to the scarcity of fish

in the Navaho country, and also to the taboo placed on them, so that little if any attention is given to the varieties.

naǎtǎgi, winged animals, birds.

Zoolatry is an important factor in Navaho religion and very few animals are excluded from worship or ceremonial use. In many instances witchcraft is attributed to these deified animals who therefor require propitiation by sacrifice and a smoke. On these occasions their secret or sacred name is used in addressing them, a list of which has been added at the end of list of insects.

THE QUADRUPEDS.

THE BEAR.—The bear is assigned to the mountains. The origin of the various species is attributed to creation out of the several organs of mythical monsters, like *shāsh nǎlkhai*, the tracking bear, and *esdzā shāsh nǎdlehe*, the woman transformed into a bear. Presumably this belief accounts for the reverence shown the bear, insomuch as the bear is ordinarily avoided. The regulations governing the meal of venison or bear are recorded elsewhere. (See Foods.)

shāsh, the bear.

shāsh tso, a large bear; *shāsh lagai*, the white bear; *shāsh kikhǎzh*, the speckled bear; *shāsh baghǎgǎ hadsisbal*, the silvertip; *shāsh bikhē ntqēl*, the bear with wide feet.

(*shāsh*) *nashkhādi*, (whose feet are spread), the black bear.

(*shāsh*) *bighānnēzi*, long back, grizzly (?).

shāsh deishjā (?).

bijā' yadizfni, whose legs stand up (?).

bitqāhūnēzi, long body.

yātsoi, yellow chin, cinnamon bear.

shāsh biyāzhi (*biyāzh*), cube.

tsēfōhi, stub tails, a general name for bears.

DEER.—Deer and elk, as also animals allied to them, are hunted for their hides and sinew, which figure largely in the manufacture of the costume and ceremonial appliances. (Cf.

articles on the Chase, Tanning, Shoemaking, Leather work, Masks, Hats and Costume, the Hoe, Awl, etc.) The deer family is, of course, assigned to the mountains.

bf', the deer; bf' yāzh, fawn; bf' khā', a buck.

bf' daālchfni, the children of the deer, as which the following are designated: jádi, antelope; dētqēl, broad horn (male of antelope); dzē', the elk; tsē, small horn deer; debé tsétqā', the big-horn; nāghāshi, the male bighorn.

FELINES.—The felines, too, are found in the mountains. The aboriginal Navaho used the skins for their costume, though at present little use is found for them. Occasionally a quiver made of mountain lion skin is still to be seen.

nashdúi (nīshdúi, nshdúi, noshdúi), the wildcat; nashdúi diné'ē, the lynx people.

nashdúilbaf, the lynx.

nashdúitso, the mountain lion.

nashdúilkhfzhi, the puma.

nashdúitsolkfhz, the leopard (extinct).

The following are probably mythical only: tsétqā' nshdúi, the cañon lynx; tŕō'nshdúi, the grass lynx; halgai nishdúi, the meadow lynx.

músi (mōsi), Sp., the domestic cat. Very probably the domestic cat is of recent introduction, and its name, músi, is a corruption of pussy.

THE COYOTE.—The coyote, a natural roamer, is given free range in mountain and valley without any specific district. Ordinarily the coyote is left unharmed, and frightened off or trapped to his death by a gun-trap.

The kit-fox is sought and highly prized for its skin, which figures as an ornamental dress of the masked personators, as well as of the masks.

má'i (nānshamá, I roam), the coyote.

má'itso, the wolf.

nātréitso, wolf, mythical name for.

mā'istsósi, slender coyote.

mā'i dotlsh, the kit-fox.

mā'i hitso (mā'itsoi), the yellow coyote, small coyote, which is also called tsélalgai, the white (tail) tip.

THE RABBIT.—Rabbits are hunted or trapped for their meat. Originally the fur was braided with yucca, and served as a rude covering or wrap. The fibula of the rabbit is still used in preparing a ceremonial whistle. (See Whistling.)

gá', or gálbaf, the rabbit, cottontail.

gá'tso, the jackrabbit; gá'tsogaf, the white jackrabbit.

gá'fli, the fluffy or woolly rabbit.

THE SQUIRRELS.—The squirrel, an inhabitant of the mountains, is eminently fitted for the role assigned to it in various legends, of prying into the secrets of the enemy.

dlódzilgai (dlózilgai), pine or gray squirrel.

dlózilshzhin (dikqfi), black pine squirrel.

dlózilshzhin binágha dadilchfigi, squirrel with reddish back.

hazaf, chipmunk; hazafso, small squirrel; hazaf altsisigi, small chipmunk; hazafstósi, ground squirrel.

tsídí'fni, rock squirrel.

tséki nastqáni, ground squirrel.

nādobó'fni, invisible to the enemy (or eye [?]), small ground squirrel.

THE RODENTS.—Rodents have their abode underground. The ermine figures in decorations at various chants.

létso (from lénü, a nest in the ground), the rat.

na'ástósi, gray mouse.

jí' iní'fhi, the day thief, black mouse.

lēni bitqfni, underground track, field mouse.

nahoshcháli, the jumper, small field mouse.

chfnanézi (chfnanézi), long snout, field mouse.

dlú'i (dló'i), the weasel, ermine; dlú'ilgai, white weasel; dlú'i hitso, yellow weasel.

dlō' (dlū'), prairie dog.

naāzfsi, the gopher.

naāshťēi alťēfigi (nahasťēhi), small field rat.

naāshťēitso, the kangaroo rat.

THE BADGER, SKUNK AND PORCUPINE.—These inhabitants of the mountains figure in decorations of some ceremonial requisites. The bite of the skunk is poisonous, and the animal is ordinarily avoided.

nahashchīd (nāshchīd, naāshchīd), which scratches out, the badger.

dā'sāni (dā' sā'á), which sits up in a tree, the porcupine.

wōłfzhi (gōłfzhi), which urinates, the skunk.

wōłfzhi tso, the big skunk; wōłfzhi alťēfsigi, the small skunk.

wōłfzhilkhfzhi, the speckled skunk.

MODERN ANIMALS.—

bisódē (Sp.), the pig. The hog is not indigenous, nor do the Navaho raise any except in very few cases. It was most likely first brought to their country from Old Mexico as the name, bisódē, a corruption of the Aztec pitsotl, seems to indicate.

bichf'yedilťsqfsi, which whips with its snout, or bichfyedilťqāli, strikes, or yedilóhe, which ropes with its snout, the elephant.

hī bīshghā dsiskfdigi, hunchbacked or hillback horse, the camel.

hī ndadeshkhfzhigi, the horse with speckled stripes, the zebra.

THE DOG.—The dogs found at every Navaho camp are a sorry looking set of mongrels but an invaluable asset in herding flocks of sheep. As a rule they are lean and mean, illfed and mistreated. Pups are early accustomed to the herd, and are frequently nursed by a goat of the herd.

hichāi (lēchāi, lēchai, from hī, pet, and chā, ordure), the dog.

lēchāstósí, the hound.

lēchāi binf ditłógi, a fluffy dog.

astāfli, or lēchāstāfli, a very small, dwarfy dog.

lēchā hasdfli, a medium-sized dog.

hichai bichf' dēg sâ'anigi, with turned-up nose, a pug or bulldog.

hichai bijā ntqēligi, broad-eared dog, a spaniel.

lēchāi lichf, red dog; lēchālbaf, gray; lēchāzhin, black; lēchālgaf, white; lēchātsōi, yellow, and lēchālkhih, speckled dog.

hichaitso, the American dog, which is usually larger, therefore, the big dog.

THE COW, SHEEP AND GOAT.—Cows, sheep and horses were originally obtained through raids upon the neighboring Pueblos and Mexicans, and later through rations issued by the Government. At present practically every family is possessed of a flock of sheep in addition to a band of cattle and horses, making their condition one of comparative affluence.

bēgāshi (vacca or bacca—shi), the cow; bēgāshi yāzh, the calf; bēgāshi dē altēsi, small horned cow; bēgāshi bichó' ādini, a steer; dōla (toro), a bull.

ayāni, the buffalo, robes of which were obtained through barter from the Plains and Pueblo Indians.

debé, the sheep; debé bichú' ādini, a wether; debé dolkóli, marino sheep; debé yāzhe, a lamb.

dēnāstā' (dolkóli), horns turned downward, a (marino) ram.

tīzi (tīsi), the goat; tīzi ditlōhi, or tīzi fli (dē fli), angora goat; tīzi chū', or tīzi khā', buck.

tīzi lizhīn, black goat; tīzi dotlīzhi, blue goat; tīzilgaf, white; tīzilkhīzhi, speckled; tīzistīni, freckled; tīzilbā'i, roan; tīzishtīshi, copper color; tīziłtsōi, yellow; tīzilchfi, red goat; tīzi yāzhe, a kid.

THE ANATOMY OF ANIMALS.

Illustrations are taken from various parts of the horse and sheep. For comparison see "Anatomy," page 80.

debé bitsānlai, the various anatomical parts of the sheep.

bitsitān, its head and skull.

bichf, its nose.

bidé, its horns.

binf, its nostril.

binā, its eyes.

binākēd, its eyegroove.

bijá, its ear (lobe).
 bijéyʔ, its inner ear.
 bizé, its mouth.
 bidá, its lip.
 ʔi biyádaʔ, the lower lip of
 a horse, or its chin.
 bowhóʔ, its tooth.
 bizáhatáʔ, its palate.
 bitsó, its tongue.
 ʔi bakhági, or debé khági,
 horsehide.
 bitsʔ, its flesh (venison, mut-
 ton, beef).
 bidʔ, its blood.
 bagán, its paws.
 bijád, its legs.
 bitsé, its tail.
 bijlchʔ, its anus.
 bizl, its penis.
 bichúg, or bíchóʔ, its testi-
 cles.
 bichá, its dung.
 bilʔzh, its urine.
 akaf, the rump.
 abéʔ, the udder, or the
 milk.
 bíshghán, the backbone and
 back.
 biyʔd, its breast.
 bitsʔ, its hair.
 bitsíghá, its mane.
 baghá, its wool or fur.
 bitsʔn (bitsʔn), its bone or
 carcass.
 akáʔ, the fat or tallow.

tsíghá, the brains.
 aqádtʔán, the joints.
 bikhé, its foot.
 bikhéshgán (behéshgán), its
 claw, hoof or cloven-foot.
 bikhétso, for instance, bíʔ-
 bikhétso, a toe or cloven-foot
 of the deer.
 behétsós (bikhétsós), its
 ankle sinew, the small toe on
 foreleg of sheep, cat, deer, etc.
 bizól, its windpipe.
 bizági, its crop.
 aghás, the gullet, esoph-
 agus.
 bijáshkash, the kidneys.
 bibʔd, its stomach.
 bitsá, its ribs.
 bizʔd, its liver.
 bijéi, its lungs.
 bijaidʔshjól, its heart.
 abid dági, the orifice of the
 stomach, pylorus.
 abʔd ikhʔni, or abʔd dʔshjoli,
 the lesser intestines.
 abʔd ántʔʔ, the spleen.
 bichʔf, its entrails.
 achʔ tsqás níʔʔʔ, the colon
 and larger intestines.
 achʔ dotʔʔzhi, the midriff
 (diaphragm).
 bichʔf nahinestééi, the inter-
 locked entrails (probably the
 same as lesser intestines).

bitsó' azís, the placenta of sheep and goat.

atsós sis, sweetbread (pancreas).

adségo, the marrow of the horn (of deer, mountain sheep, etc.)

habíd jigaf, the tripe.

WORDS REFERRING TO ANIMALS.

má'i nádlósh, the coyote trots, which is said of most animals.

naghá, it walks, is said of most quadrupeds.

ndzití', it rushes or runs quickly, is used of lizzards, rabbits, rats, etc.

tíish ná'ná', the snake crawls.

shásh baghán, a bear's den; baghán, a lair; á'án, a burrow.

hónsh'ó'gi, a bear's den.

má'i döldlóshi, a fleet coyote.

duitáda, it is mean (a bear).

nasbdúi bēikhá, the sand painting of the wildcats.

bitsín, or tsín, a carcass.

dí'fl, or dítsós, bushy; dítló, fluffy; dí'fl, dítsós and dítló, may be said of bedding (yatqél), blankets (beéldládi), and other objects, while chísh dítló, or dí'fl, may be said of a caterpillar, but not chísh dítsós.

THE HORSE.

Horses are kept for breeding, riding and driving purposes. They are rarely fed, being turned out at large after use. Even when at work little or no feed is provided, as the Navaho is indifferent to the needs of his horse. Yet they thrive where others of their kind might starve, and in addition give remarkable tests of endurance.

Horses are usually broken at about the age of four. They are then singled out from among the wild herd and hitched to a post for a day and night without food or drink. Driving horses are hitched with a broken horse to a wagon, and in course of time learn their lesson, which is anything but thorough, since

the Navaho is as poor a driver as he is a horseman. After a riding horse has been starved in the above mentioned manner a saddle and bridle is forced upon it, the rider mounts and allows the horse all liberty to rear and jump and buck until the animal relaxes from sheer weakness. It is then tied to a post and given to drink, only to remain hitched there throughout the night. It is gentler when mounted next morning.

Words referring to the horse and riding.

- | | |
|---|---|
| Ĥi, a horse. | Ĥi bakhá', or Ĥi bichúg qá-
á'nŕi, a gelding. |
| Ĥilgai, a white horse. | Ĥi bá'ád, or Ĥi tsá'i, a mare. |
| Ĥi dīl, a large, strongly
built horse. | lě yázhe, a colt. |
| Ĥi dotŕizhi, a blue (gray)
horse. | Ĥi iskhá'i, a three or four-
year-old foal. |
| Ĥi lichfi, a red (sorrel) horse. | Ĥi yáshchíd, filly foal (three
or four-year-old). |
| Ĥi litsói, a yellow horse. | Ĥi dozhóhi, an unbroken
horse, a bronco. |
| Ĥi labá'i, a roan horse. | Ĥi izhód, a broken, gentle
horse. |
| Ĥizhín (Ĥi hizhfnigi), a black
horse. | tqéli, the burro. |
| Ĥi yistŕni, a freckled horse. | tqellabaf, the gray burro. |
| Ĥi likhizhi, a speckled horse. | jānēz (dzānēz), long ear,
the mule. |
| Ĥi dinilzhfni, a brown horse. | tsétqá' Ĥi, a mustang. |
| Ĥilqfni (Ĥi nilqfni), a mouse
colored horse. | Ĥi daálchfni, wild (unbroken)
horses. |
| Ĥishtŕshi (yishtŕshi), a cop-
per colored horse. | Ĥi ná'iyéhi, a saddle horse. |
| (bi)tsighalzhfni, a black-
maned horse (color of body
light). | Ĥi nálbási, or tsin neŕlbási,
a driving or work horse. |
| tsighálagai, a white-maned
horse. | Ĥi náshiyé', Ĥi shoyéi, I am
horseback. |
| tsighálichf, a red-maned
horse. | Ĥibē nashá, I travel horse-
back. |
| Ĥi chúgi, a stallion. | |

Hi bikidasédá', I am astride.
Hshil naldlósh, I ride horse-
back (trots with me).

Hi nálgyéd, the horse bucks.
nalgyédi, a bucking horse.
aqádestqál, he steps evenly,
paces.

bagál yátó', his gait is good,
easy gaited.

Hi naljá', the horse leaps.

Hi nólqtál, the horse lopes.
yildlósh, the horse trots.

Hi shil ndzil't', or Hi shiltqá-
dílyéd, the horse runs (with
me).

átlá dahalné', he raises be-
hind, he bucks (in the rear).

Hi yóslághud, a runaway.

Hi dflawhó', a fast horse.

Hi néldzidi, a shy, plunging
horse.

Hi biyánahalyízi, a shy horse.

Hi shildesyíz, the horse shies
with me.

Hi nāshlǵó', or Hi shændsfl-
qál, the horse threw me.

Hi sístqál, the horse kicks
me.

Hi áditqáli, a kicking horse.

Hi shikadestéin, he paws at
me, a rearing horse.

Hi shlshqásh, the horse bites
me.

Hi shikdiltqál, the horse
stepped on me.

Hi alkidasédá', I ride with
another on a horse (two sit
together).

Hi shidi'nf, the horse is "siz-
ing me up," watches me.

Hi behétlöl (bikhétlöl), the
hobble.

Hi behétsf beestló', the horse
is hobbled.

Hi á'ál, the horse is eating
grain.

Hi ilchózh, the horse grazes.

Hi daháshtló', I hitch a horse
or tie him to a post or tree, I
stake him out (Hi dahastló', he
is tied), or Hi danáhashtló (da-
ndahashtló, many), I hitch or
tie a horse again.

bánúshjá, I feed grain.

bánúshjöl, I feed hay.

Hi yislós, I lead or bring a
horse.

Hi yish'ésh, I bring two or
more horses.

Hi yáhanáslós, I lead a horse
into (a stable).

Hi yáhanash'ésh, I lead two
or more horses.

Hi téinslós (Hi chíinsh'ésh), I
take or lead them out of a sta-
ble or corral, or field.

Hi tqáhislós (tqáhish'ésh), I
water horses, bring or lead
them to water.

Hi baghán, a stable or shed.

Hi bichúg qashnî, or achúg
qashnî, I castrate a horse or
animal, which is done with an
ordinary pocketknife.

Hi bitqîn, a trail.
Hi bikhê, a horse track, or
hoof, or shoe.

THE SADDLE.

A gentle horse is ridden bareback for a short distance, but very few riders show any desire of taking chances with a saddleless bronco. Riding, therefor, is usually done with a saddle and bridle.

The Navaho saddle consists of a saddle-tree covered with rawhide, and usually studded with several rows of brass-head tacks along the borders. The saddle-bar is made of cottonwood (tîs), the cantle and peak of pine (ndishchf). The peak is not pommelised but either rounded or squared. Two pieces of rawhide covering the bar and peak are overlapped by another piece covering the cantle. Two straps lapped over the girth rings are then tacked to each side of the peak and cantle, whereupon the cinch or girth is attached to the right girth ring by means of a piece of rawhide, and the cinch strap to the left girth ring. The stirrup straps are usually fastened directly to the saddle-tree. The old box stirrups, which were formerly very general, have now been replaced by iron ones. The crupper, which in the early days was connected to the rear of the saddle by a wide belt of rawhide, has almost entirely disappeared.

For lassoing purposes the Navaho saddle is inadequate and was never intended for that. The Navaho, moreover, is not very skilled at handling the lasso, which he does afoot. After corraling or cornering a horse (steers are rarely lassoed) the rope is whirled above the head towards the neck of the horse. If successful the operator drops on his seat allowing himself to be dragged along until the horse stops when he is approached with much caution and timidity.

American saddles are at present much in demand. Ropes, too, are either purchased or made of buckskin, and sometimes of

horsehair. In dismounting the bridle reins are thrown over the pony's head and left dangling to the ground, or the rope is strung out within easy reach, or tied to a tree.

Girths or cinches are mostly purchased, but were also woven of yarn and plaited with horsehair. The saddle blankets are, of course, of native fabric. The hobbles, which are invariably tied to the saddle, are made by the Navaho of rawhide. The blanket, and sometimes a sheep pelt or two, are secured in a bundle in the rear of the saddle. Cantinas and saddle-bags are usually added to modern saddles.

Words referring to the saddle.

Ĥi biyæl (horse's pack), the saddle.

Ĥyäsēnil tsfnigi, the saddle-tree, or the wood including peak, bars and cantle.

Ĥyäsēnil, rawhide cover of the bars and peak.

fnashjēi, the snugly fitting cover of the cantle.

āsēnil, the girth rings for the cinch and strap.

Ĥi biyæl bikināztī', the two straps saddled to the girth rings.

āchoshtfōl, the girth or cinch.

āchoshtfōl bāsēnil, the rings of the girth.

āchoshtfōl bēelchī'didlō', (which draws it together), the cinch strap.

bīdēs'ēs, the stirrups; bīdēs'ēs bitfōl, stirrup straps.

Ĥi biyæl bikēde hā'ā', the saddle-bags.

akēēsēnli, or akēēsīltsōsi, the small cantinas.

Ĥi biyæl bigīsh, the saddle seat.

agīsh dāsīltsōsi, the small seat blankets used in riding.

besh lichī il'ādālkhāli, the brass tacks for decorating the saddle.

akīdahī'nli, or akhādahā'nli, the saddle blankets.

bitsā ātf'gi, the crupper and belt attached to rear of saddle.

Ĥi biyæl alnā' īāhigi, the crossed saddle, the pack-saddle. This is not much in use since light transportation, such as of wool, flour or eatables, is done with the ordinary saddle.

Ĥi biyæl bidā' daqā'ā, (projecting saddle rim), the pommel, sad-

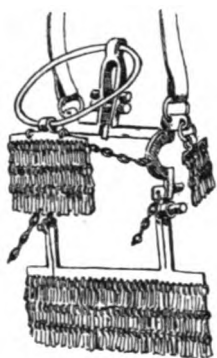
dle horn on modern saddles. Navaho saddles are not decorated, but *biKīnashchā*, decoration or design, is used for the American saddle.

ĥi *biKīdahashnī*, I saddle a horse.

biKīda'nshdā (*biKīdanśdā*, *biKīda'dīneshdā*), I mount.

ādāshā (*ādāyā*, *ādādeshāl*), I dismount.

THE BRIDLE.



Bits are made by native smiths of old horseshoes and iron scraps. A hackamore ring is attached to the lower part and is often decorated with chains dangling from it as shown in accompanying cut. The headstall, consisting of brow band and cheek straps, is often made of common rawhide, decorated with heavy silver plates, and is a great favorite with women on festive occasions. Bits and headstalls are now usually purchased

at the stores.

A rope is sometimes looped over the nose of a horse and serves as a bridle without a bit.

azātī', the bit and bridle.

azātī' ntqéligi, the wide bit, the old Navaho bridle bit.

ĥi *bizāstqān*, the bit (across the mouth of a horse). This word is rarely used.

azātī' binitfól, (face strings), the cheek straps.

azātī' bitfól, the reins or lines.

atqānāntī', the brow band.

ānī Kīdaān, the halter.

azānāstī'īgi, the neck strap.

āyadā bāsā'ā, the hackamore ring.

āyadā nāntī', the chains below the bit.

THE QUIRT (WHIP).

The quirt is indispensable in riding and is swung continuously, in addition to vigorous jabbing of the heels into the horse's flanks.

The quirt is slipped over the wrist by means of a loop by which it is also slipped over the pommel of the saddle in dismounting. Spurs are not generally used.

běetsqís, a whip, or quirt.

nánstsqís, I quirt or whip it.

THE HARNESS AND WAGON.

Harness and wagons of any kind were not in use by the early Navaho, but are of quite recent introduction. They are issued by the Government, though many prefer to purchase a better grade of wagons and harness, including light rigs and buckboards for driving. The farm wagon is used for freighting, hauling wood, and often for travelling.

With the introduction of harness the plow, harrow, scraper, mower and rake rapidly followed.

THE HARNESS.—Words referring to the bridle will be found on preceding page.

ákinázt'í, "put around," the harness.

azát'í bitlól, the lines or reins.

azádetqáni, (put on the neck), the collar.

azádeinli tsfnigi, (wooden things for the neck), the hames.

oshkísh út'ígi, (side line), the traces.

chóshtlól (ächóshtlól), the girth.

binígo'á' bátqís l'tígi, the harness saddle.

bishghágo nt'ígi, the back strap connecting with crupper.

bítsá át'ígi, the crupper.

bitláya nánt'ígi, the (rear) bridging.

ñ bichf', the horse's nose, the nose-bag.

baghádish'níl, or ñ bikiná'ashtló, I harness a horse.

ñ bánídeshníl, or ákinázt'í bánídeshníl, I unharness a horse.

THE WAGON—and its parts.

tsfnábás (tsín nábás), the wagon.

adági danaskhésigi, or tsfnábás bidági danaskhésigi, the neck-yoke.

ñ bitqágo na'áhigi, (which extends between the horses), the wagon tongue.

átfáyá dasénfli bánaná'áhigi, the double-tree.

átfáyá dasénfli, the single-tree.

átfáyá dasénfli biT'áhigi, (the vertical pin of single-trees), the wagon hammer (queen bolt).

tsfnábás bitsá bánaná'áhigi, (which extends for the box), the bolster.

tsfnábás bitsá bánaná'áhigi biT'áhigi, the king bolt.

tsfnábás bijád, a wagon wheel.

tsfnábás bijád tsín bináz'áhigi, (wood around the wheel), the felloes.

tsfnábás bijád bínáneskháligi, (lock the wheel [?]), the spokes.

tsfnábás bijád besh bínaz'áhigi, the tire.

tsfnábás bijád bitsítsín, (the head of wheel), the hub.

tsfnábás bijád bínálághúligi, (in which it turns), the axle-box.

tsfnábás bijád bi'anágtisigi, (around which it turns), the axle.

tsfnábás bijád bánaná'áhigi, (which extends for the wheels), the axle-tree.

tsfnábás bijád bebfnídlóigi, (which binds the wheel), the brake and the axle nut.

tsfnábás bishghán, (its backbone or spine), or tsfnábás bigtsh naná'áhigi, (which extends at its division), the reach or coupling pole.

tsfnábás bishghán biT'áhigi, the coupling pin.

tsfnábás bijád bebfnídlóigi bitqánáná'áhigi, (which is between the brake-shoes), the brake-beam or bar.

tsfnábás bitsá', the wagon box.

bikídahasdáigi, the seat.

tsfnábás bikéstqíigi, the wagon cover.

tsfnábás bitsá, (ribs), the wagon bows, or tsfnábás bitqási das'áhigi, (projecting on the sides), the bows.

ná'ásbás, I drive.

naná'ásbás, I turn.

nanígo qá'ásbás, I turn aside; natá qá'ásbás, I return.

qēl, a load of freight.

tsfnābās bī qēl ē'ēshlē, I load a wagon.

tsfnābās bī qāishqē, I unload a wagon.

ndeshqēl, I haul freight.

ba'ndeshqēl, I haul for another (mentioning for whom).

tqādīmfi dahidédlōgo ndeshqēl, I will haul three thousand pounds of freight. The Navaho do not know the value of weights. Expressions referring to hauling and weights are comparatively recent and coined to meet the requirements of traffic.

dukwī bā'ilfgo ndeshqēl, I will haul for so much, or for how much shall I haul?

f'ishnfi, I put in, I load several things.

bi'yishjá, I put grain into the wagon, also other forms as the object put in requires: bi'yish'á, a box; bi'yishjól, hay or wool; bi'yishtqē, beef; bi'yishtqí, a pole or shovel; bi'yishlé, a rope.

tsfnābās bijé, axle grease.

tsfnābās yishjé, or nā'ishjé, I grease a wagon.

sitsfnābās kēóltqó', or sitsfnābās sítēfi, my wagon is broken.

tsfnābās dijádi, a buckboard, buggy or light rig.

tsfnābās yázhe, a wheelbarrow.

nábál, a canvas wagon cover.

besb aghádaás'á'igi, a bolt; besb dahózhái, a chain.

aqInáldās, fallen apart, a broken wagon.

HORSE DISEASES.

Diseases of the horse are not treated as a rule, but are allowed to take their natural course.

fi dátsá, the horse is sick.

fi biná dínf, or nesgaf, sore or running eye.

fi bizahat'á' dínf, or nesgaf, sore palate, the lampers. The horse is thrown by winding a rope around its feet, fore and aft, and slipping them under it. The lampers are then cut out with

a knife. A similar process is observed in castrating sheep, horses and bulls; áchō' (áchúg) qashnī (qá'áshnī), I castrate.

Ĥ bakhági bitqát'á qo'á, or Ĥ bakhági dáhadísöl, or dá'dilchīl, loose skin, hidebound.

Ĥ bilfzh yikháhanáldzīl, (causes groaning [?]), gravel or kidney trouble.

Ĥ bilfzh bēē'nī', (presses), the colic.

Ĥ bichá ná'alīzh, (urine excrement), or Ĥ bichá bagháíná', (flows), diarrhoea or dysentery.

bilód, saddle galls, which are removed with a knife, or washed occasionally.

nánlqūd, he limps.

bikhē nesgaf, sore or tender feet.

Ĥ bitsós qishgyésh (qégīzh, qídesghīsh), I cut an artery, I bleed a horse.

Ĥ bizahat'á yishgīsh (shégīzh, deshghīsh), I cut the lampers.

HORSE RACING.

Horse racing with light betting is frequently indulged in. On festive occasions betting is very heavy, losses being sustained with as much indifference as gains are accepted with joy and laughter. The Navaho is as cheerful a loser as he is a winner, and often stakes his most treasured possessions on a single issue.

A fleet horse is better cared for than the usual run of horses, and is often practiced and trained long before the race.

Ĥ neiltqfhi, a horse race; Ĥ shilyiltqé, I race a horse.

Ĥ niqīl alghádit'ásh (alghádit'ásh), I race with another, we race together.

nihinshdá', I bet; bēso, etc. benihīnshdá', I bet money on anything.

Ĥ bēnihinshdá', I bet a horse, and on a horse.

lāida benihinsdsá, I have bet heavily.

sháhunezná', I lost a bet; Ĥ sháhunezná', I lost a horse.

Ĥ bēhunélná', my horse won (on which I had a bet).

táshunezná', or ħi sitáji adflāghūd, (ran from me), I lost the bet, the latter expression meaning also, I lost the race.

ħi shá'adflāghūd, (ran for me), I won the race.

REPTILES.

What has been said of the quadrupeds in regard to worship, is true also of the reptiles. The snake, with the exception of that listed as the track snake, each has its prayerstick and corresponding song and ceremony, while the track snake figures in the sand painting, which it encircles.

The snake is ordinarily brushed aside, and its venomous bite remedied with native herbs. The cure is applied with good results to both man and animal, but is known only to a select few, who apply the concoction without ceremonial ado. A dead snake is not looked upon, and the skin shed by the snake is not touched.

Names of reptiles.

nā'āshói is sometimes used to designate any creeping animal, but refers more properly to the lizzards.

tġish dinš'ē, the snake people.

tġish, a snake.

dġyósh, a noiseless snake, the bull snake (garter).

tġish do áttġ, the track snake (a long, green and speckled snake).

chézhf' tġish, the malpais snake.

tġish áfnigi, the sounding snake, the rattlesnake.

tġish (do) náġgi, the flying snake.

tġishkġ, the arrow snake.

tġish adilqáshigi, the snapping snake.

tġish dilqġ, the black snake.

tġish dotġish, the blue snake.

tġish ħitsó, the yellow snake.

tġish ħagaf, the white snake.

tġish diśóś, the silvery snake.

tġistso, the horned snake (copperhead).

bichói (tġish bichó'i), the grandmother snake.

tqótġish, the water-snake.

LIZZARDS.

The lizard, specifically the Gila monster, is the god or medium of divination by sensation in some rites, as in the wind chant.

na'ashói dichíízhí, the horned toad.	naáshúí qá'Ichíídi, the lizard which scratches out.
nashúíłbaí, the gray lizard.	tséKínaázóli, which makes a noise on the rocks, rock lizard.
nashúíłbaí dilawhóigi, the fleet lizard.	
nashói dotłsh, the blue lizard.	tséKínaázóli łabá'i, the gray rock lizard.
nashúíłgai, the white lizard.	nashadłó, a small lizard (?).
nashói nálnódi, the large, green lizard.	tqínlaf (ice layers [?]), the Gila monster.

WATER ANIMALS.

Water animals are sacred and figure in many rites. The skin of the beaver and otter were used in making highly prized headbands, while the fur of beaver and muskrat still decorates some rattles. It is said that these animals were quite plentiful on the banks of the rivers, and the skins were often bartered from neighboring Indians.

tqáłłá naldéhi, the water animals.

tqábástqín (tqábáastqín, probably from tqábá, the shore and setqí, it lies), the otter.

tsóstqíni (łitsó setqíni), the yellow otter (?).

chā, the beaver.

tqábá' má'i, the muskrat.

łó', the fish; łótsó, a large fish.

łó' bowhó qá'áigi, with teeth turned downward (extinct).

The following fish are probably mythical.

łó dilqł, the dark fish; łó łitsó, the yellow fish; łó łagaf, the white fish; łó bakhá' and bá'ád, the male and female fish.

chál, the frog; chál dichííshi, or cháltsó, the toad.

chál nnsézi, the green frog; chál yázhe, the small frog.

tsilaghá', the water-dog: tsilaghá' bokhósdo hánölzhéi, with the fringed neck; khátsIn, (woody skin), similar to a water-dog. tqálkhádijádi, water-bugs.

tsó'sáni, tadpole, which are lizhíni and lichígi, black and red, also tsó'sáni bitsá' hulóni, basket shaped tadpole, and tsó'sáni aqInläigi, which fold.

chädagháhi, which is tired, the turtle.

tsistqél, the tortoise.

yöchlóshi, a turtle valued for beads made from its shell.

The shells of turtles are used as medicine cups.

NAMES OF BIRDS.

Birds in general are called nātági (nahátági), which fly. Apparently birds are not classified in distinct groups, with the exception perhaps of the eagle, with which the hawks are usually identified. Many birds derive their name from some physical distinction, such as color, in many instances also from their call, as the transliteration will show.

Quite a number of birds are sacred and anthropomorphic, and consequently have a prayerstick and sacred name assigned to them. Chief among these are the atsá diné'ě, eagle people, who inhabit the yághahoká', or heavens above, depositing their plumage and walking about there in the form of beautiful youths (dzilkhé). The Navaho do not kill eagles and hawks allied to them. These are caught at times but released after the desired feathers have been plucked. No hesitancy is felt in using the feathers of a dead hawk or eagle for the arrow shaft and other than ceremonial purposes.

An offense against the eagle, or any illness which is felt to be due to their influence, must be remedied through the bead chant (yóé hatqál), known also as the eagle chant. The eagle people are said to have taught this chant to one dufnikhi, who is therefore its author here. The sand painting commemorating his

assumption by eagles into the celestial regions is one of the distinctive features of the bead chant.

THE EAGLE.—

atsá, (it clinches its food), the eagle.

atságai, the white eagle; atsázhin, the black eagle; atsálba'i, the gray eagle.

dáltso (dáltsoi), the yellow beak, or tšájltsoi, yellow beak.

(atsá) tšájlgai, the white back eagle.

atséltso, or atséltsoi, the yellow tail, the red-tailed hawk (*Buteo borealis*).

gíni, which calls gí, gí, a hawk (applied also to Cooper's hawk). This is also called gínlibai, the gray hawk.

gínitso, a larger size of this hawk.

gínitso dotlísh, the big blue hawk.

gínitso díqlí, the dark hawk.

chíltqátšági, which flies among the weeds, the marsh hawk.

tsíyálzháhi, which hunts below the trees, the bird hawk.

tsíyálzháhi tso, the large bird hawk.

tsíyálzháhi biná lichfigi, the red-eyed bird hawk.

dzlí, which cries dzlí, dzlí, the sparrow hawk.

THE OWL.—The owl is sought for its feathers and many do not hesitate in killing them. The owl is mentioned frequently in the role of a spy, and is sacred.

nééshjá, the horned-owl; nééshjá hastqin and nééshjá eadzán, the Owl Man and Owl Woman.

nééshjá bá'ná'ái, which sit side by side, the American hawk-owl.

dlútqá' nééshjá, owl amongst prairie dogs, the burrowing owl.

nééshjá kháli, the owl which makes the noise, khál, khál.

náké'ni, an owl.

tsídildóí (tsídildóni, or tsíndildóhi, from its noise, dō, dō), the small screech-owl. Of these there are also tsídildóí lagai, dotlísh, litso and díqlí, the white, blue, yellow and dark screech-owl, respectively.

THE CROW, AND OTHERS.—Crow feathers are sought for the arrow shaft and for use in ceremony. The buzzard is not molested, and both are sacred.

jěshó, the turkey buzzard; gágě, the crow.

tqázhi, the turkey.

nádzedlózi, the road-runner.

daldáni, the quail.

á'á'í, the magpie. The turkey, road-runner, quail and magpie are patrons of destí, star reading. destí binátqo, eyewater for star reading, consists of a mixture of the eyewater of these four birds. tqázhi bæězhó, the turkey's tassel, the feathers of which are used in making sacrificial cigarettes (ket'an). tqázhi bitá', turkey feathers, and tqázhi bitsé, the turkey tail feathers, are also used ceremonially. tqázhi bikhé, the turkey's track or footprints. tqázhi ilkhéi, like the turkey's track, designates the thongs or claws on the pole of the hoop and pole game.

SMALLER BIRDS.—

ayázh, or ayázh altqás'af, various small birds, is a general name for the smaller varicolored birds which have no special name. They are said to have been produced from the feathers of the monstrous eagle, tsénahalé'. Their feathers, and those of the blue and yellow bird are added to the ket'an, prayersticks, to the masks, and otherwise.

dóli, the bluebird.

tsádkitsói, the yellow warbler.

ayáshilchí is said to signify the red back. It should probably be derived from ayásh ilchí, the small redbirds, which is also true of the following kinds: ayásh dílqil, the small, dark birds; ayásil-tsói, the small, yellow birds; ayáshilkhízh, the small, spotted birds,

WINTER BIRDS.—The following group was dressed for winter at the creation, and also figures ceremonially.

chíshisháshi (from its call, chíish, chíish shqá), a small, crested bird.

chíshibézhí, (from its call, chíshi, chíshi, bé bé), the chickadee.
díl'tóshi, the titmouse (snow-bird).

tsínk'háli, (from the noise, khál, khál, produced in picking), the sapsucker.

tsínk'háli tso, the woodpecker.

nik'é'nf, similar to an owl.

WATERFOWLS.—The greater number of waterfowls and shore birds are sacred. The Navaho do not eat them, with the exception of the turtledove.

dél diné'ě, the crane people.

dél, or déli, the sandhill crane.

tqáktlá'halé', the blue heron.

tqáktlá'halé' lagáigi, the white heron.

tqójiindigai (tqokindigai), the snowy egret.

tqójinolná' (it crawls in the water), the roundbill crane.

dákt, twig bill (white breasted, gray backed), crane.

yázhazhjol, crop or ball neck crane (the swan [?]).

qóz, a crane.

tqábásdisi, (which bores into the shore), the snipe; tqábásdisi altsísi, the small snipe; tqábásdisilbal, the gray snipe. Their call is *bss*, *bss*.

nál'éli, (which floats), the duck; nál'éli dílqfígi, the dark or black duck; nál'éli dotfízhigi, the blue duck; nál'éli hísígi, the yellow duck; nál'éhitso, the mallard; nál'éli do-nat'ági (dónát'áhi), the non-flying duck, the goose; nál'éli dónat'ági dílqfí, dotfísh and lagaigi, the dark, blue and white wild geese.

hasb'di, (from its cry, bid, bid), the mourning dove; hasb'ditso, the large, and hasb'di altsísi, the small, wild dove; hasb'dilgai, the pigeon.

tqáshjízhi diné'ě, the swallow people.

tqashjízhi, the swallow; tqashjízhi ndílkísi, (from its cry, kís, kís), the cliff swallow; tqashjízhibai, the gray swallow.

dóliłchi, the redbreasted bluebird found near streams.

ADDITIONAL SACRED BIRDS.—

jā abāni, the bat; jā ntsēli, the crystal ear bat.

bīzhi, the bull-bat or night hawk.

jōzhghāli (chōzhghāli), a large, yellow bird.

dā'tqōīnoghāli, which shakes the dew, the marsh wren (?).

dahitqfhi (dahitqf), the hummingbird.

OTHER BIRDS.—

tsidilbāhi, a gray bird; tsidiltsoi likhīzhigi, the speckled yellow bird.

jāg'tōdi (jak'tōdi), from its cry, jāg'f, jāg'f, tōd, tōd, the titmouse.

chīshi kīneshbīzhi, (resembling corn dumplings), a small bird.

debēnf'f, (from its call, shbshāō, shbshāō), Say's phoebe.

tsīshgaf, white head, the nuthatch.

nēēzhīn, the black-breasted woodpecker.

neshchī biyā', pine louse, a small sap-sucker.

tāyālchī, red breast, the yellow-hammer.

zāhalāni (zād lāni, many words), the mocking-bird.

tsiya'wōzhi, prickly head, the meadow-lark.

chīshgāhi, the western robin.

yāhalzhīn, a black spot on its neck, applied also to the sparrow.

kai bīsi, (which calls bīs, bīs), the willow-bird.

hoshdōdi, (which calls, wūwū, wiūw, wūwū, wiūw), the whip-poor-will.

jīnf'f, (its call, jī, jī), gray bird with red-spotted neck and head.

tsīdi chīlnfhi, the bird which announces the snow (gray with white wings).

chōzhzhāgi (jōzhzhāgi), from its cry of zhā, zhā (?).

chōshfāhalzhīn, black calf of the leg (?).

nākā nā'ijīni, black eyebrows.

ayātī dishkāni, whose side hair project.

tsīl hazēsi, (burnt tail [?]), yellow, reddish tail.

jādīdlū'i (jadīshdlū'i), snow-bird, seen in flocks in winter, but scattered in summer.

tsenáolchóshi, the cañon wren.

tsenáolchóshilchí, the rock wren.

chági, (from its call, chág, chág), the blackbird.

chágitso, the large (yellow winged), blackbird.

chágilbai, a small, gray blackbird.

BLUEBIRDS.—

tsán lani, many tsán, also called qash'ai (from its cry, á'i, á'i), the chapparal jay or pifonero.

tsándilzhéi, (its cry, zhí, zhí), which is also called tsándistqísi, the tsán with the shins, the small bluejay.

jógi, (from its cry, jóg, jóg), the bluejay.

doli (dól, dól), the bluebird.

MODERN.—

nahóqai (naqóqai), the chicken. The Navaho do not raise chickens, nor do they, as a rule, eat eggs.

nahóqai baghán, a chicken
pen.

nahóqai bakhá, a rooster.

nahóqai bá'ád, a hen.

nahóqai biyézhí, an egg.

nahóqai biyázhi, chicks.

Words referring to the anatomy of the bird.

The words used in designating the various parts of the bird's anatomy are practically identical with those used for the human body. The bird, however, has no face (biní), no teeth (bowhó), and nose (bichí'), and chin (biyátsín).

tsídi, a bird.

tsídi biná, the bird's eye.

biná tqēl, broad eyes (like the owl).

tsídi bidá', a bird's bill or beak.

bidá yáshish, a curved or hook bill (such as the eagle's or hawk's).

tsídi bizé, the bird's mouth.

bizé hótáá, large mouth (such as that of the bull-bat and whip-poor-will).

bítsó, its tongue.

bijéyí', its ear.

The bat (jáábáni) has bijá, ear lobes and bowhó', teeth, but no legs.

bokhós, its neck.
 bitá', its wing feathers.
 bitsós, the small and down
 feathers.

bitá' ya'tá, the crest.
 bitá' ástáin, the wing.
 bitsé, its tail and tail feath-
 ers.

bitsítsín, its skull and head.
 bëeyá, the back of its head.
 bitsí, its hair.
 bijád, its leg.
 bijástqís, its shin.
 bakhági, its skin.

Words referring to birds.

Birds are not endowed with the faculty of speech excepting in their mythical character. The zāhalāni, mocking-bird, alone is said to speak (yáltqi). Neither do they sing, properly speaking (hatqál, he sings, being used of humans). Their song, cry or call is universally expressed by

tsfdi anf (adanf), the bird
 says or sounds.

natá', or yitá', it flies.

yaatá', or naatá', it flies or
 scoops down (like an eagle).

alkéyikha, or nanákha, it
 flies in a circle.

tsfnshqtázh, it picks the
 wood, like the woodpecker.

tsfdi bitó', any kind of
 bird's nest.

The eggs of birds are not eaten. Some birds, as the turkey, the bluebird, the yellow warbler, the mourning dove, and some snow-birds, are occasionally eaten.

tsfdi bflá', the bird's fingers,
 (its toes).

biláshgān, its claws.

biláshgān nās, long claws
 (such as the hawk's).

bibíd, its stomach.

bitsá, its ribs.

bitsá', its abdomen.

bichíf, its entrails.

bizíd, its liver.

átlísh, the gall.

bijéi, its lungs and heart.

bijáshkāshi, its gizzard.

gfni bitó', a hawk's nest,
 and so on.

tsfdi bikhé, a bird's track.

tsfdi, or gá' deildél, they eat
 birds or rabbits (such as owls,
 hawks, etc.)

chōsh deildél, worm-eating
 birds.

tsfdi biyézhi, bird eggs.

tsfdi biyázh, or biyázhi,
 young birds.

tsfdi bildédél, (bildishdél, I catch), I caught a bird in my hand.

tsfdi yínishlé, I ensnare a bird.

tsfdi bewödléhi, a birdsnare.

tsfdi bitá' hanshtqá, I hunt bird feathers.

Birds are varicolored, some being likhízhí, speckled; dínízhfn, black mixed with red (or black spots); dínílbá', brown spots; dínílgaf, white spotted; díníchf, with a tinge of red; díníltso, with a tinge of yellow; and dínóltfísh, a tinge of blue.

NAMES OF INSECTS.

Insects are divided into two general groups, chósh ndátáhi, flying insects, and chósh biyázhi ndajéigi, the small insects, which walk. The former group may be subdivided into dádishíshi, which sting, as the bee and the wasp, and bidá' yédaastsós idaté, which suck out with their lip, as the mosquito. The other group also includes mere worms, or bijád daádin, which have no legs.

BEETLES (*Coleoptera*).—

Kínædlíshi (ginídlíshi), the stink-bug. Of these there are also Kínædlíshi tso, the large stink-bug, and Kínædlíshi altsísigi, or yázhe, the small one, and Kínædlíshi bitsé hulónigi, the one with a tail.

má'ichán, coyote dung, the scarabee; má'ichá altsísi, the small scarabee; má'ichá bijád bídadsígáigi, the beetle with white legs.

tqálchá, or chélchá (hítsóigi, yellow), June-bug; chélchá nodózigi, the striped beetle; tqálchá altsísigi, the small beetle; chélchá dílqíligi, the dark beetle.

nítsá'gö' (the rain splash, from the noise it produces in alighting), the wood-beetle; also nítsá'gö' lízhfnigi, the black, nítsá'gö' altsísigi, the small, and nítsá'gö' adátsísi daalzfní, the very small, black wood-beetles.

cháneilqízi, a scarabee (found in corrals); ídá', or dóní cháneilqízi, the humming (brown) scarabee; cháneilqízi altsísigi,

the small scarabee; tseyo'áhi, or tsene'áhi (*habáigi*, gray), the stone carrier, scarabee, also tseyo'áhi *hizhnigi*, the black one.

tqēl tsitsoi, the pinching-bug.

wódæ etsáhi, the snapping *wó'*, pinching bug; *wodæ etsáhi dilqil*, the dark pinching beetle. *wó'* is said to be the noise produced by walking on the ground, and occurs frequently in the names of insects.

wo'ntfisi, the hard *wo*.

wónalchfli, the small beetle (minnow [*?*]).

wónalchfli hitsóigi, the small yellow beetle.

wóshiyfshi, the hooked beetle (curved back).

tqo biclósh, the water beetle.

tqo biclósh kikhzhigi, the spotted water beetle.

chfl dílyfai biclósh, the scare-weed beetle; *chfl dílyfai biclósh lichfigi* and *habáigi*, the red and gray scare-weed beetles.

ndiyfli biclósh, the sunflower beetle; *ndiyfli nłchfni biclósh*, the beetle of this species of sunflower.

iktłhi biclósh, the rubber-plant beetle.

wá' biclósh, the bee-weed beetle.

tféshi kikhzhi, the spotted horsefly.

jéhigháhi ntsásigi, the large beetle which enters the ear; also other species, as *jéhigháhi lichfigi*, *dotłzhigi*, *hizhnigi*, the red, blue and black beetle, and *jéhigháhi naatáigi hitsóigi*, the yellow one which flies in a circle.

neshchf biyá, the pine louse, pine weevil.

tsInayái (tsIn iyá'), which eats wood, the wood-borer (*?*).

tsIn dotłzhigi, the blue borer, and *tsIn hagáigi*, the white one (similar to an ant).

nahachłdi, which scratches with its feet (*?*).

wó' daalchłhi, the squash-bug.

GRASSHOPPERS, LOCUSTS, ETC. (*Orthoptera*, *fan-winged*).—

wóneshchłndi, (which makes the shrill noise of *chł*), the locust.

wóneshchłndi tso, the big locust; *wóneshchłndilgai*, the white locust; *wóneshchłndi biná lichfigi*, the locust with red eyes;

wóneshchíndi biná dotłzhigi, with blue eyes; wóneshchíndi bijékháhi, the deaf locust, which is also called wóneshchíndi altéfli, from the sound, tál, tál, which it causes by boring into the wood.

naháchági, which hops, the grasshopper; naháchági tso and yázhi, large and small; naháchági díłqfli, dark; dotłshi, blue; naháchági hashtłshi, the mud-colored grasshopper; naháchági íłtési, the sizzling or midsummer grasshopper; naháchági íłtési-íłchí and íłtési dotłzhi, the red and blue of this kind.

nahákíse, the cricket.

WASPS AND BEES (*Hymenoptera*, *four-winged*).—

wóna'altqéhi, which picks up, sand-wasp; wóna'altqéhi dotłzhigi, the blue sand-wasp; wóna'altqéhi híłhfigi, łabáigi, híłhfnigi, híłsóigi, red, gray, black and yellow sand-wasps.

tsís'ná'tso, the bumble-bee.

tsís'ná'łtsoi, the yellow wasp; tsís'ná'łtsoi numázigi, the round wasp; híłhłzhigi, speckled; tsís'ná'łbáhi, the gray wasp.

tsís'ná' yázhe, the honey-bee; tsís'ná' híłhfnigi, black wasp; tsís'ná' bíjád nnésigi, the long-legged wasp.

FLIES (*Diptera*, *two-winged*).—

dó'tso, a large fly.

tseédóí, the housefly; tseédóí yázhi, the small fly; tseédóí adíłqáshigi, the biting fly; tseédóitso, the large fly (housefly).

łlézhi (dlézhí), the horse- or cowfly; łlézhitso, the larger one; łlézhilbaí, the gray horsefly; łlézhi yazhi, the small one.

łł bitsís'ná', the horse bee (which lays its eggs below the hide of a horse).

łłfi tso, a small horsefly.

bitsé nnézi, the long tail, robber-fly.

łłfi, the gnat.

łłdánézi, long-lipped gnat, the mosquito.

łłyáni, meat eating gnats or flies.

ánłtáni (?), the sacred bug of the Navaho. A small bug with

green spots on its wings and abdomen. Usually found in corn-fields.

anl'ánitso (anl'ánitso), the harvest bug (!).

wó'nálchídi, which skips. the skipper-bug.

BUTTERFLY AND MOTH (*Lepidoptera*).—

Kálúgi, a butterfly; Kálúgilgai, white butterfly; Kálúgitso, yellow butterfly.

Kálúgi tso, large butterfly, which is varicolored, such as kálúgitso lichí, the large, red butterfly, etc.

kálúgi yázhi lizhíni, the small, black butterfly. The small butterfly is also lichí, red; lagáigi, white; litsóigi, yellow.

icháhi (icháhi), the moth (ishchá, it falls into the fire).

icháitso, the large, and icháhi yázhe, the small moth.

DRAGON-FLIES (*Neuroptera*).—

tqánil'al, which is spread out on the water, dragon-fly.

tqánil'al dotl'izhi, the blue dragon-fly.

tqánil'al yashe (dotl'izhigi, blue), the small dragon-fly. Other small dragon-flies are litsóigi, yellow; labáigi, gray; ailqínigi, greasy; lichíigi, red; lagáigi, white; lizhínigi, black.

jád neizhódi (jánishódi), which drags its feet, and also jád neishódi tso, and jád neishódi yázhi, the large and small one.

chósh nodóxigi, speckled bug (!).

chósh lizhín adikáshigi, the black biting bug.

WINGLESS INSECTS (*Apteri*).—

náashjéi (nashjéi), the spider.

nashjéitso, the large spider (also used to designate the tarantula).

nashjéitso labáigi, the large, gray spider.

nashjéi yázhe, the small spider.

nashjéi nahacháigi, a small, jumping spider.

nál'áshi, the spider which plods along, the tarantula.

nál'áshi tso, the large tarantula.

nāashjēi tsīzīsi, the head basket spider. The abdomen suggests the carrying basket. The domestic spider.

nashjēi tsīzīsi bijānézi, (long legs), daddy long legs.

nashjēi tsīzīsi labāigi, the gray spider, and nashjēi tsīzīsi bināgha lichfigi, the spider with the red back.

lēzōli, the spider which blows the dust.

naazōzi, the small, red sand spider which stings badly.

saigō', the scorpion.

jād lāni (jālāni), many feet, the centipede.

wō dīlnfhi, which feels its way (before walking).

ANTS.—

wolachf, the red ant; wolachf dīlqll, the dark-red ant.

wolachf yāzhe, the small ant.

wolachfītsoi, the yellowish-red ant.

wolazhni (wolāzhn), the black ant; wolazhni tso, the large ant; wolazhniłtsōi, the yellow-black ant.

wolazhni bijē jilchfigi, with a red front; wolazhni nā'łtsā'āgi, the listening ant (which turns its head toward any noise), and wolazhni nīchūnigi, the stinking ant.

LICE.—

yā', a louse; yā'ashchf, red louse; yāzhn, black louse; yālgaf, white louse; yā'łbaf, gray louse; yā'stēfli, from tsēl, the noise made in smashing them.

diné' biyā', lice found on the person.

łi biyā', horse lice; łi biyālgai, white, and łi biya'stēfli the large horse louse.

āyā', the tick; debē biyā', sheep lice; yā' dotłfzhi, blue sheep louse; debē biyā'stēfli, the large sheep louse.

Similarly, lechāi, dlū, gā', jādi biyā', lice of the dog, prairie dog, rabbit and antelope.

bf' biyā' dotłfzhi, the deer louse.

nahóqai biyā', the mite on chickens.

wōsitēfli, the bedbug.

tsedái, the rim-louse (similar to a bedbug).

t'ó' nadá biyá', the cinch-bug.

WORMS AND GRUBS.—

chōsh, the maggot.

wōsekidi, the tobacco worm (these are varicolored, speckled, gray and black).

wōsetšini, the grub.

wōsizini, the "standing bug" (?).

nadá biclōsh, the cut worm.

nadá biclōsh altšisigi, the small corn worm.

chōsh bokhói, the fire-bug; **chōsh dotłizhi**, the blue worm.

chōsh yideltqóhi, the smooth worm.

chōsh dítłó, the hairy worm.

tsékiyahi'áhi, a small, brown, horned worm (grub or pupa [?]).

Words referring to insects and their anatomy.

bīhodzándi ádin, a mere passage, applied to the stomach and intestines of reptiles, fish and insects.

chōsh bitá', the wings of an insect; **bitsitšín**, its head; **bakhági**, its skin; **biná**, its eyes; **bowhó**, its teeth; **bijád**, its legs or feet; **bijé**, its forepart; **biláshgān**, its claws (of beetles); **bílá'**, its mandibles, or toes.

bizóz, its sting; **bizóz dahulóni**, such as have a sting.

dadishfsh, they sting.

bítšágāl (**bité aghál**), the rattle of a snake.

wōneshchīndi bakhági, the locust's shell.

biyázhi, the pupa of most insects.

wolázhín, ants, have both **biyázhe**, pupa, and **biyézhi**, eggs.

naashjéi biyázhe bizís, spider egg bag; **naashjéi biyézhi**, spider eggs; **nashjéi bitłól**, cobweb; **naashjéi ndistł'**, fan or web enclosure.

nál'áshi baghándi, the tarantula's nest.

chōsh yi'ná, worms and bugs creep; **chōsh natá'**, or **yítá'**, some fly.

wolachi ilaghül (yflaghül), ants and similar insects, bedbugs, lice, etc., run.

nashjēi ilaghül, the spider runs.

nāl'āshi yigāl, the tarantula walks.

tāf'ī' sītās, a gnat bit me; tseēdō'i ājishishqāsh, a fly bit me.

wónaltqēi shíshish, a wasp stung me.

bildédēl, I caught a fly or insect.

Lice infest both the body and head, and are probably due to the utter disregard of cleanliness. They are removed in a very matter of fact way by submitting the clothes to a careful scrutiny, or searching the hair for them. The latter is especially done by the mother, and is very common with the female members of a family, who exchange the courtesy. Spasmodically, too, a more energetic campaign against these parasites is carried on by some exasperated individual, as the following words and expressions would suggest. The results obtained are very good indeed, but rarely permanent.

yā shídlilaghüd, I feel lice creeping over the body or head.

adishchífd, or yā ishchífd, I am scratching myself (owing to lice).

yā shinlqf, I am lousy.

yā shíshqāsh, I am bitten by lice.

yā qādish'f, I am searching for lice.

yā ndishtqé, I am catching lice (yā ndíltqf, I caught lice).

yā ak'fidishgá, I kill the lice; yā sélqf, I killed a louse.

yā sélqtāl, I smashed a louse.

yā daséltqín, I froze the lice (by exposing my clothes at night).

yā'ishbézh, I boil the lice, that is, my clothes.

shiyā ādin, or yā sha'ādin, I am rid of lice.

In earlier days lice were exterminated by means of an instrument called yā bēgá, the louse killer. This was made of a hard wood, tsáf'iz (*Findlera rupicola*), and required five smoothly polished thin sticks, one edge of which was beveled and slightly sharpened, with their tips tapering to a point. Near the upper

end each stick was punctured with two holes through which a cord was laced, and the ends crossed in the rear, so that in operating the sticks overlap and close snugly, as with a fan. A loop at the lower end of the sticks was provided to receive the hand and hold the instrument in position. In operating it the points were passed under the hair, hard to the skin, and by pressing the lower ends of the sticks and drawing the two strings together, the teeth or beveled edges were brought into contact and crushed any vermin falling between them. The louse killer is no longer in use, but is made only at a certain ceremony for dispelling filthiness. *yá hastqín*, the Louse Man, designates a monster, in other words, the louse, or filthiness personified.

SACRED NAMES OF ANIMALS.

Navaho zoolatry includes practically the entire native fauna, which accordingly enters largely into ritual and worship by the use of skins, feathers, claws, tissues, and the like. Then, too, the figures of many animals appear in the sand drawings, as that of the eagle, the deer, the antelope, prairie dog, turkey, and others. Still, the most general method of animal worship consists of a sacrifice in the shape of a prayerstick, the colors of which correspond with those of the animal, and which subsequently is deposited near its habitat. The stick is therefor "dressed" for the animal, that is to say, it is colored and decorated with plumes, fed with tobacco, which is symbolically lighted, and then placed into the hands of the patient or, if there be many prayersticks, they are lined in their order of precedence in the ceremonial basket. The singer then proceeds to dedicate them by song and prayer, in the course of which he invokes the divinity by its own sacred name. A list of these names is herewith presented, with such translations as were available, though frequently their meaning becomes clear only through a detailed legendary account.

The names of the male and female usually correspond, excepting that *jikhé natáni*, maiden and chief, is substituted for

dzilkhæ natāni, youth and chief. The list represents only names of animals for which a prayerstick is dressed, while some birds, as the whip-poor-will, mocking-bird, Say's phoebe, and insects, as the gnat, weevil, etc., are not recognized by ritual.

BIRDS.—

The crow (gāgi), ūlchī' dilqīli nābiyoltqēli dzilkhæ natāni, turned on his side by the dark wind, fine young chief; or, tqālchā nādlehe dzilkhæ natāni, which name is said to originate with the bī'ntāni, the deer grower, who used the crow as a spy for his victims of witchcraft.

The buzzard (jīshō), dzilkhā dokāli dzilkhæ natāni; or, simply, dzilkhæ dokāli, the fine young chief who sways in his flight above the mountain.

The eagles (atsā naghāi).

The eagle (atsā), dāltsoi dzilkhæ natāni, yellow beak, youth and chief; dāltsoi jikhæ natāni, yellow beak, maiden and chief.

The others are invoked in a similar manner:

The black eagle, atsāzhīn dzilkhæ natāni.

The spotted eagle, sāg dzilkhæ natāni.

The white eagle, atsāgai dzilkhæ natāni.

The gray eagle, atsālbai dzilkhæ natāni.

The marsh hawk, atsēltsoi dzilkhæ and jikhæ natāni.

The uglier eagles, atsā danchōigi:

The black hawk, gfnitso dilqīl dzilkhæ natāni.

The blue hawk, gfnitso dotMsh dzilkhæ natāni.

The gray hawk, gīnlbaf dzilkhæ natāni.

The sparrow-hawk, dzfli dzilkhæ natāni.

The white back eagle, tājilgai dzilkhæ natāni.

The turkey (tqāzhi), dzilkhæ dsotfhi dzilkhæ natāni, the fleet youth and chief.

The owl (nāeshjā), hayolkhāligi biyf' neyāni dzilkhæ natāni, the youth and chief raised within the dawn; or another name:

tsin alnf qináha dzilkhæ natáni, living in the middle of the woods, the youth and chief.

The screech owl (tsidildóni), comes in for four names, both in the feather (atsósiji) and in the night chant (tšéji): hayolkháí biyázh dzilkhæ natáni, the little one of the dawn, youth and chief; náhodætšish biyázh dzilkhæ natáni, child of the celestial blue, etc.; náhotsoi biyázh dzilkhæ natáni, child of the sunset yellow, etc.; chahalqéí biyázh dzilkhæ natáni, child of the darkness, etc. In the night chant the invocations are identical excepting that biyázhi, offspring, child, is substituted for biyázh, thus: hayolkháí biyázhi dzilkhæ natáni, child of the dawn, youth and chief, etc.

The snipe (tqábádsísi), tqábádsótšhi dzilkhæ natáni, running at the edge of the water, youth and chief.

The twigbill crane, tšáí dzilkhæ natáni.

The blue heron, tqáíłáqaálé' dzilkhæ natáni.

The snowy egret, tqójjindígai dzilkhæ natáni.

The roundbill crane, tqójjinołná' dzilkhæ natáni.

The ball neck (swan [?]), yáhashjöl dzilkhæ natáni.

The crane, qóz dzilkhæ natáni.

The duck, nál'éhi dzilkhæ natáni.

The teal (?), nál'éhíłbai dzilkhæ natáni.

The goose (wild), do natági dzilkhæ natáni.

The mud-hen, tqúidozósí dzilkhæ natáni, drawing a line of water after it.

The woodpecker, tsíłkháí dzilkhæ natáni.

The meadow-lark, tsíyawúzhi dzilkhæ natáni.

The quail, daldáni dzilkhæ natáni.

The small birds, ayástósí dzilkhæ natáni, feathers of which are largely in use for decorating the masks, prayersticks, rattles, etc. Others of this description are:

A very small bird, ayá shíłchí dzilkhæ natáni.

A blue-crested bird with large bill, ayásh dotšish dzilkhæ natáni.

A bird similar to an owl, *nŋke'nf*, or *nakēnf*, and active at night, is invoked as *tsendesbági bidá dotŋish (nakēnf) dzilkhæ natáni*, he of the curved gray rock and the blue lip (bill), the youth and chief.

Another night-bird is invoked as *nakhidolaghúshi dzilkhæ natáni*, the youth and chief who calls twice.

The bull-bat (*bízhí*), *yatá' boghángi kós díłqíl behoghándi kós díłqíl yí' neyáni dzilkhæ natáni*, at the celestial home in the house of dark clouds where he was reared, the fine young chief.

The bat (*jaábáni*), *tsétqáhatsogi ja nŋtsíli esdzá niyéł íshhá nádihlá*, Bat Woman of the mouth of the big cañon, I have made a sacrifice to you, your smoke (cigarette) is ready. (For a male patient Bat Man is substituted for Bat Woman.)

INSECTS.—

The grub (*wósatsíni*), *níyí hazlí dzilkhæ natáni do qínán dzilkhæ natáni*, created in the earth, thou youthful chief, and living youth and chief.

The grasshopper (*nahachági*), *nŋkehíl'ásh dzilkhæ natánf (?)*.

The caterpillar, *nŋhatsós dzilkhæ natáni*.

Small beetle, *wónalchíli dzilkhæ natáni*.

The centipede, *já láni dzilkhæ natáni*.

The scorpion, *sálgó dzilkhæ natáni*. Another similar to scorpion, *tsíldilqáshi dzilkhæ natáni*.

The spider, *nashjéitso dzilkhæ natáni*.

ANIMALS OF THE LAND.—

The bear (*shásh*), *dziłyí neyáni dzilkhæ natáni*, reared in the mountains; or, *dziłyí' nnádahi dzilkhæ natáni*, roaming in the mountains, etc.; or, *tsín yí' nnádahi dzilkhæ natáni*, roaming in the woods, the fine young chief.

The porcupine (*dasáni*), *chídá náskídgí dzilghá nadáha dzilkhæ natáni*, the fine young chief who penetrates the mountain at the hill of the thorn-bush (the male); *chídá náskídgí tséghá nadáha jikhæ natáni*, the fine maiden chief who penetrates the rock at the thorn-bush hill (female).

The deer (bŋ'), tŋonehelfgi nŋhodaŋgai dzilkhæ nat'āni, the youth and chief of the white patch (?) at tŋónehelf (a sacred spring).

The antelope (jádi), tŋonehelfgi nŋhodastso jikhæ nat'āni, the fair maiden chief of the yellow patch (?) at tŋónehelf.

The big-horn (tsetqādebé), tŋonehelfgi kīdahuidzōgi nīhodash-jŋni dzilkhæ nat'āni, the fair young chief of tŋónehelf, at the black spot in kīda huidzōhi (a peak in the Black Mountains).

The female big-horn, tŋónehelfgi kīdahuidzōgi nŋhodashtŋzhi jikhæ nat'āni, the fair young maiden chief of tŋónehelf, at the blue spot of kīdahuidzōhi.

The wolf (mā'itso), natŋéitso dzilkhæ nat'āni.

The mountain lion, nishdūtso dzilkhæ nat'āni.

The wildcat, nishdūtŋbai dzilkhæ nat'āni.

The puma, nishdūtŋkhīzh dzilkhæ nat'āni; also tŋo nshdūi dzilkhæ nat'āni, the meadow wildcat.

The badger, nahaschīd dzilkhæ nat'āni.

The skunk, wolŋzhitso dzilkhæ nat'āni.

The spotted skunk, wolŋzhikhīzhi dzilkhæ nat'āni.

The gopher, nītqāŋ' naghái nīyenāhidī'nābi (naazŋsi) dzilkhæ nat'āni, the fine young chief walking in the bowels of the earth and shaking the earth in his course (thou, o gopher!)

The coyote (mā'i), qa'á biyāji khaitqá dilaghūshi dzilkhæ nat'āni, the fine young chief howling in the dawn beyond the east.

The dog (léchāi), khintqēlgi dobŋdīnshdidāhi hashchēlŋtqi bilŋ dzilkhæ nat'āni, that fine young chief of the wide house, the inseparable companion and pet of the Talking God.

The yellow fox (mā'itsoi), bilŋ'qodidezŋ dzilkhæ nat'āni, the chief and youth created with the earth.

The kit-fox (mā'i dotŋzhi), bildāāke ndahazlái dzilkhæ nat'āni, the youthful chief of the bordered fields (?).

The jackrabbit (gā'tso), hajīnaŋ gā'tsogai dzilkhæ nat'āni, the chief and youth of the emergence (the white big rabbit).

The rabbit (ga'ŋbaŋ), hajīnaŋ ga' dzilkhæ nat'āni, the youthful chief rabbit of the emergence.

The prairie dog, *hajinaf dlō dzilkhé natāni*, the youthful chief prairie dog of the emergence.

The rat, *hajinaf lētso dzilkhé natāni*, the youthful chief rat of the emergence.

REPTILES.—

The rattler (*tīsh āfnigi*), *nī ałnī hoghángi*, *dlád dlīqlī behoghángi*, *dlád dlīqlī niyf neyāni dzilkhé natāni*, the youthful chief reared in the earth with dark moss (duck-weed [?]), at the house in the center of the earth, the house made of dark moss.

The females differ slightly: *nī ałnī hoghángi*, *dlád lāgai behoghángi*, *dlád lāgai niyf neyāni*, *jikhé natāni*, the maiden chief reared in the earth with white moss, at the house in the center of the earth, the house made of white moss.

The bull snake (*diyōsh*), *nī ałnī hoghángi*, *dlád lītso behoghángi*, *dlád lītso niyf neyāni*, *bitēis tqādidfni*, *dzilkhé natāni*, the youthful chief, whose body is of pollen, and who was reared in the earth with yellow moss, at the house in the center of the earth, the house made of yellow moss.

The arrow snake, *tīshkā dzilkhé natāni*.

The water-snake, *tqótīsh dzilkhé natāni*.

The track snake, *tīsh dōntīhi dzilkhé natāni*.

The copperhead (?), *tīstso dzilkhé natāni*.

The horned toad (*naashōi diclīshi*), *nī ałnī hoghángi*, *dlád lāgai behoghángi*, *dlád lāgai niyf neyāni*, *dzilkhé natāni*, the youthful chief reared in the earth with white moss, at the house in the center of the earth, the house made of white moss.

The gray lizzard (*naashōilbai*), *nī ałnī hoghángi*, *dlád lītso behoghángi*, *dlád lītso niyf neyāni*, *dzilkhé natāni*, the youthful chief reared in the earth with yellow moss, at the house in the center of the earth, the house made of yellow moss.

The common lizzard (*naashōilbaſ*), *nī ałnī hoghángi*, *dlád lāgai behoghángi*, etc., as for the horned toad.

The large lizzard, *nashōi nálnōdi*, *dzilkhé natāni*.

The rock lizzard, *tsékinaázóli dzilkhé natāni*.

The green lizzard, *shainizezni dzilkhé natáni*, standing in the sun youthful chief.

The Gila monster, *tqííílai dzilkhé natáni*.

The tobacco worm (*wósæíídi*), *sháitqá dzilkhé natáni*, the youthful chief (?).

WATER ANIMALS.—

The otter, *tqábástqín dzilkhé natáni*.

The water lizzard (?), *náhodlō dzilkhé natáni*.

The beaver, *chā dzilkhé natáni*.

The turtle, (tortoise), *tsístqél dzilkhé natáni*.

The turtle, *chædagháí dzilkhé natáni*.

The dark fish (*lō díqíí*), *tqáííánaldói dzilkhé natáni*, the youthful chief slowly creeping in the waters.

The male fish (*lō bakhá*), *tqáííánaldói dzilkhé natáni*, the youthful chief slowly creeping on the waters.

The toad (*chāí dííííí*), *tqáííáhoghángi dííí díqíí bíííneyáni tqábasdái dzilkhé natáni*, the youthful chief of the house in the water, he who was reared in the dark moss, and sits at the shore.

The green frog (*chāí nnézi*), *tqúííolíkóli dzilkhé natáni jin*, they call him who draws the water after him youth and chief.

The skipper, *tqáííádííáí dzilkhé natáni jin*, and he that walks over the waters they call youth and chief.

The tadpole (*tsōsáni*), *tqáíííqíí yénáíííííí dzilkhé natáni*, the youthful chief who stirs the dark waters (male); *tqáíííííí yénáíííííí jikhé natáni*, the maiden chief who stirs the blue waters (female).

In addition some generic names are used for various groups, such as *nahóké' naldéi*, animals creeping on the ground, or reptiles; *dzíííé' naldéi*, the animals of the mountains; *tqáíííí' naldéi*, water animals.

Mythical animals, too, occur, such as *tqéííoltsōíí*, the water ox; *tqéíí*, the water horse; *lō dííé dáííáni*, man-eating fishes, which are white, blue, yellow and dark.

Some chants and myths have special sacred names for a number of the animals already mentioned.

The coyote, hayolkháł yitqádilaghüşhi má'i łagai, the white coyote who howls in the dawn; náhotsoi yitqádilaghüşhi má'i litso, the yellow coyote who howls in the evening twilight; náhodætłish yitqádilaghüşhi má'i dotłish, the blue coyote who howls in the sky-blue (of the south); chahalqéł yitqádilaghüşhi má'i diłqłi, the dark coyote howling in the darkness (of the north).

The otter (tqábâhastqîn), tsenási, sitting by the stone; tslnási, sitting by the log; khûnási, sitting by the fire; tqonási, sitting by the water.

The porcupine, (male and female), dzilbánatá dzilkhé natáni, who carries the mountain.

The cat (mósi), khe dodītsáda, the noiseless foot.

The chipmunk (hazafstšösi), diyf yosłni, versed in divine things.

The arrow snake (tłishká), nıqahonotsé, the coil (?) with the colors of the earth.

The flying snake (tłish natági), nıhonodóz, changing in the colors of the earth.

The snake (tłish), bitsıs yenaghái, who walks with his body (the male); bitsıs yeoshóshi, who crawls with her body (female).

The bull snake (diyósh bakhá, male) bitsıs ghaıyetł, he with the transparent body; the female bull snake, bitsıs tqadıdın, the pollen body, These names, however, are not complete.

The tadpole (tsösáni), nákelı, who floats above, or tqüinabéli, who swims in the water.

The skipper-bug (tqalkhádiyadi), dichłi yináhıdł'náhi, the abalone moving from one side to the other.

The yellow fish (łö litso), tqókênaldói, slowly creeping with the flow of water; the white fish (łö łagaf) tqókênálagháł, turning over and back in the water.

The nádle, or hermaphrodite, doing male and female work, is dlád biładłi nłkidoysı, drawn with water scum, and moving on the ground.

PLANT LIST.

The flora of the Navaho country is rich and diversified so far as species as well as variety of color and form of plants and flowers are concerned, and the following list of plant names shows that the average Navaho possesses a fair knowledge of the flora of his native country. There are probably very few plants for which the Navaho have not distinct, well chosen names, and of whose physical and physiological properties they have not made some observations. This knowledge, however, is by no means general, which is true especially of the younger generation, who, owing to varied circumstances, do not pay particular attention to herbs, flowers, seeds and roots, as their forebears were wont to do. The older people, on the other hand, seem to be well versed in plant lore, and usually agree as to the name and properties of a plant, and its present or past use.

The physical and physiological properties often give the observing Indians a clue for the name of a plant. Thus they have plants with red roots, broad leaves, slender stocks, flowered or feathered tips, striped seeds; plants that grow on the shore, in the water, in the sand, or bind the border of adobe; plants that taste saline, bitter or sweet; plants that bloom at night; plants that have a pleasant or a disagreeable odor, or have the odor of spruce, buffalo, rat, sheep, etc.; plants that are big, slender, large or broad; plants that are rough, smooth, glittering, thorny; plants that have red, white, blue, yellow, or other colored flowers; plants whose leaves or fruit resemble owl's feet, snake's fangs, antelope's horns, etc.; plants that climb or creep; plants that serve, or are supposed to serve, as food for humming-birds, frogs, snakes, bees, and other animals, etc. A glance over the list will fully illustrate this.

By far most of the species are designated as "azē," medicine, and are known for their medicinal properties. It might be said,

in truth, that this is the keynote to the plant lore of the Navaho, since non-medicinal plants are designated as "t'öchil," or merely plants. On the other hand, their observations of the medicinal properties have in reality accounted for the discrimination of the various species of plants, and while many of their "medicines" are traditional only, tradition has preserved the name, although the object, and often the significance of the word, is obtained with difficulty.

Some of the medicinal plants are applied as remedies, while others, with few exceptions, are used ceremonially only, and since all their ceremonies are supposed to be curative, plants thus used are also designated as "azē," medicine, although they may not possess curative or medicinal properties.

In studying the plant lore of the Navaho, it will be found that the knowledge of plants and their properties is by no means the exclusive trust of the shamans or medicine men. True, their knowledge is quite extensive, especially so far as plants used ceremonially are concerned. Yet it is none the less true that ordinary laymen often exceed them in the knowledge of medicinal and phenogamous, or flowering herbs, although the knowledge of the latter may frequently be feigned in order to conceal their mortifying ignorance.

Studios care has been exercised in identifying the various species of plants. Indeed, it will be noticed that many have been merely recorded for want of proper identification. An endeavor has been made to transliterate accurately. This feature not only illustrates the working of the Indian mind as regards discrimination of species, but also furnishes striking illustrations for language study and construction of words. In many instances the basic idea of the Navaho technical term is quite obvious, while in others it is obscure, which has been noted, especially where, for instance, comparisons seem far-fetched. And, while the list makes no pretense at completeness, it is hoped that many suggestions, especially for the student of philology, will be found therein.

There can hardly be a question as to the facility of the Navaho mind for particularization. As to generalization, the Navaho is certainly not devoid of it, and while there seems to be no trace of botanical orders, as our text books present them, we find unmistakable proofs of observation, which group certain species under one order. Such, for instance, are grasses, *tłó*; seed-dropping grasses, *tłódē*; tobaccos, *na'ó*; spruces, *chō*; junipers, *gād*; cactuses, *qōsh*; foods, *dā*, etc. In these and similar groups, the general name of the plant is applied to all, but a word expressive of some peculiarity is added to designate the species or variety. For illustrations see list.

Since so many indications of generalization are extant, an effort was made to seek further evidences of this kind by grouping the plants according to the Navaho classification. Beyond the general designation of "azē," however, nothing definite could be obtained. This plan, therefor, had to be abandoned, and the present one, of grouping them according to the accepted orders, resorted to. These, with their various species, have been alphabetically arranged, and a transliteration of the Navaho names has been added in brackets.

And since it was desirable to have the list as complete as possible, not only indigenous plants have been entered upon the list, but also such grasses, shrubs, fruits and vegetables as have been introduced and to which the Navaho have given names.

AMARANTACEAE (*Amaranth Family*).—

chīl deinfn, (sharp or cutting plant), Russian thistle, *Salsola Kali* var. *tragus*. (Chenopodiaceæ [?])

naskhādi, (spread out), rolling or tumble weed, *Amarantus blitoides*.

tłó' deiskhdi, (hilly seed grass), *Amarantus retroflexus*. The leaves and seeds are edible when mixed with grease.

tłó' dēnayfsi, (turning or rolling seed grass), tumble weed, *Amarantus albus*.

ANACARDIACEAE (*Cashew Family*).—

chīlchīn, (abbreviated from *lichī*, red, and *nīchfn*, odorous).

is said to be so called from the strong odor of the seed. The aromatic sumac, *Rhus aromatica var. trilobata*.

Another name for it is *kī*, by which the small stick or twig is meant, which was sharpened and driven into the reed-shaft, and fastened there with sinew. The arrow point was secured to this stick, which was therefor called *bikī*, its stick, or simply *kī*, as in expressions like *kī hashá*, I am going for *kī*, or sticks.

The word is also rendered and used by some as *tsínchín* (*tsíłchín*, *tsíłchín*), in which sense it would point to the odor of the shrub or wood.

ishshjíd, poison ivy (?), *Rhus toxicodendron*.

ASCLEPIADACEAE (*Milkweed Family*).

dóbicłíjílchí', (*dó*, negative particle; *bicłí'*, towards or for it; *jílchí'*, or *yílchí'*, give birth, therefor, birth preventing). Silk- or milkweed, *Asclepias Hallii*.

jádíldéi, (*jádi*, antelope; *il*, or *yil*, like it; *dē*, horn, therefor, like antelope horns, i. e., leaves), *Asclepiodora decumbens*.

tłish ildéi tsós, (slender, snake-horn like), silk- or milkweed, *Asclepias verticillata*.

The latter two are referred to as *abé' huló*, milky.

azē jighaf, (whitish medicine), *Asclepias verticillata*.

AURANTIACEAE (*Orange Family*).—

chíl hitso lakhánigi, (sweet yellow plant), orange, *Citrus aurantium*.

chíl hitso dokózhigi, (sour yellow plant), lemon, *Citrus limonum*.

Oranges and lemons are known to the Navaho only as fruit. Both are called *chíl hitso*, yellow plant, but many acquainted with both make a distinction by adding *lakhánigi*, sweet, for the orange, and *dokózhigi*, sour, for the lemon.

BERBERIDACEAE (*Barberry Family*).—

tsíyá chéchéil, (*tsíya*, or *tsinya*, under the trees; *chéchéil*, or

tséclil, rock plant), barberry, *Berberis Repens*.

BORRAGINACEAE (*Borage Family*).—

azē qājini, (azē, medicine; qa, from out of ground; jīn, black, i. e., black-streaked stock), gromwell, *Lithospermum angustifolium*.

azē qājini labá'igi, (grayish-black stock), gromwell, *Lithospermum multiflorum*.

ijéhe, (which is gummy), *Echinopspermum Redowskii*.

ijéhe labá'igi, (gray gummy one), *Krynitzkia crassise-pala*.

The last two named species are commonly called ijéhe.

azē nānesdizi tsōs, (slender, winding medicine), stone-seed gromwell, *Lithospermum canescens*.

tqázhi nlchfn, (turkey odor), meadow rue (?), *Krynitzkia glomerata*.

CACTACEAE (*Cactus Family*).—

The cactuses are designated as qōsh, or whōsh, thorn, spine. The ribs are called bitá, leaves, and these are either round, nūmāsi, or, as in the spreading or prostrate species, ntqéli numāsigi, wide-roundish. The various species have been grouped here without reference to their technical terminology. They are probably mostly varieties of *Cereus*.

dīchf bowhōsh, (hunger cactus).

jéi náyogisi, (twisted heart), so called because when eaten it is said to make one feel as if his heart were twisted.

kā' bīzhi, (braided arrow), so called from its interbraided leaves.

qōs détsahi, (awled cactus), named after its long, awl-like spines.

qōs détsahi tsō, (big awl cactus), cane cactus, *Opuntia arborescens*.

qōs détsahi tsōs, or qostsōs, (slender awl cactus).

qōsh, (a thorn), the common red cactus, *Opuntia rutila* (?).

qōsh dānānes'āhi, (cactus with thorny rim).

qōsh diltqóhi, (smooth cactus).

qōsh dīnesbfni, (squatting cactus), a large number of round heads forming dense hemispherical masses, *Cereus Phoeniceus*.

qōsh dokōzhi, (saline or sour cactus), so called from its taste; small orbicular.

qōsh kīneshbfzhi, (broken braid cactus), so called from its similarity to the food preparation, kīneshbfzhi, braided dumplings.

qōs litsōi, (yellow cactus).

qōsh ntqēli, (broad cactus), prickly pear, *Opuntia Missouriensis*.

qōsh ntqēl habā'igi, (grayish broad cactus).

qōsh sēdāhi, (sitting cactus), one or few heads with conically shaped apex, *Cereus conoides*.

qōstso, (big cactus), *Opuntia Comanchica*.

CAMPANULACEAE (*Campanula Family*).—

tqādīdīn dotlīsh altsīsigi, (small blue pollen), the harebell, bell flower, *Campanula uniflora*.

CAPPARIDACEAE (*Caper Family*).—

wā', the bee-weed, or spider flower, *Cleome pungens* (Sonora [?]).

CAPRIFOLIACEAE (*Honeysuckle Family*).—

tsētsokin, the snow-berry, or Indian currant, *Symphoricarpo*.
fdashjin, or tlō'dēi, marsh elder, high water shrub, *Viburnum*.

CARYOPHYLLACEAE (*Pink Family*).—

azē tlōhi, (grass medicine), the sandwort, *Arenaria aculeata*.
dzil nāt'ō' tsōs, (slender mountain tobacco), the catchfly, *Silene Douglasii*.

tqakhāsākhād, (standing on the water), the mouse-ear, *Cerastium arvense*.

CHENOPODIACEAE (*Goosefoot Family*).—

chil beshndlēzhi, (plaster plant), a saponaceous plant.

cāil lichfigi, (red plant), the common beet, *Beta vulgaris*.
 duwúzhī, or duwúzhīzhfn, black greasewood, *Sarcobatus*
vermiculatus.

duwúzhīlbaf, gray greasewood, *Atriplex canescens*.

gā'tsodā, (jackrabbit food), white sage, or winterfat, *Eurotia*
lanata.

lēchāi yikēchf, (dogs defecate upon it), a variety of *Sarcobatus*.
 mā'istqēi, (coyotes rest there), another variety of *Sarcobatus*.

tālkōzh, (salt-weed), or tālkōzh yidānigi, (edible salt-weed),
Atriplex argentea.

tālkōzh sēzfni, (standing salt-weed), *Atriplex expansa*.

tālkōzh deinfni, (sharp salt-weed), *Atriplex confertifolia*.

tō'dēi, (seed grass), pigweed, *Chenopodium Fremontii*.

tō'dēi ntīzi, (hard seed grass), *Chenopodium*.

tō'dēitso, (big seed grass), lamb's quarters, *Chenopodium*
album.

tqō ishī, (water blackens it), *Chenopodium leptophyllum*.

tsfyā tō'dēi, (seed grass under a tree or log), *Chenopodium*
cornutum, or *Teloxis cornuta*.

COMPOSITAE (*Composite Family*).—

altqānetsēhi, (interlocking plant), cockle-bur, clot-bur, *Xanthium*
strumarium var. Canadense.

atsānlchīn, (odorous of the eagle), the aster.

azē disōs, (glittering medicine), so called probably on account
 of its glossy root, cudweed, *Gnaphalium Sprengelii*.

azē dlōhi, (laughing medicine), the yellow thistle (poisonous),
Cnicus Neo-Mexicanus.

azē hokhāni labā'igi, (gray terraced medicine), the sow thistle,
Lactuca or *Sonchus asper*.

azē hokhāni tso, (big terraced medicine), the plumed thistle,
Ochocentrus.

azē iltsaf, (dried medicine), milfoil, *Achillea*.

azē hākhān, (sweet medicine), *Actinella scabiosa*.

azē nāōltqādi, (unwinding medicine), *Townsendia serica*.

azé náóltqádi altsósigi, (slender unwinding medicine).

azé náóltqádi tso, (big unwinding medicine).

The above three are so called from their use in connection with ceremonial knots, wóltqád. The herbs are chewed and spat upon the knots, which are then unravelled; hence the name, unwinding medicine.

azé ndōgaf (white stalk medicine), a sage-brush, *Artemisia franserioides*.

azé ntqéli, (broad medicine).

azé háldzíd, (decayed medicine), *Xymenopappus filifolius*.

azéwhō', (tooth-leaved medicine), the rayless golden rod, *Bigelovia Vaseyi*.

bílqāzhchf', (odorous with the breeze), because its fragrance is carried on the breeze, the thoroughwort, *Epatorium occidentale*.

chíl dílyfsi (tsildílyfsi), dodgeweed, *Gutierrezia euthamiae*.

chíl lichfi, (red plant), the radish, *Raphanus sativus*. The same word is also used for tomato and beet. These vegetables are not indigenous, but after being introduced they became known to the Indians by their color. In like manner cabbage, turnips and white radishes are called chíl lāgaf, white plants.

chíl tsōs, (slender plant), *Aplopappus lanuginosus*.

chíl whóshi, (thorny plant), the bur-marigold, *Bidens*.

chílzhó (ilzhóli, limber, limber plant), *Actinella Richardsonii*.

chíndi chíl, (evil spirit weed), *Bigelovia graveolens*.

hazailtséi, (like a squirrel's tail), yarrow, *Achillea millefolium*.

jádi ná'tō', (antelope tobacco), or diné'ě chíl, (people's weed), *Lygodesmia rostrata*.

kaldgi dā, (butterfly food), fleabane, *Erigeron flagellaris*.

kasdá bēgá, (an antidote for arrow poison), thoroughwort, *Eupatorium purpurium*. The poison was usually added to the arrow-point fastened to the shaft, kasdā.

kítsōi, (yellow twig), the rayless golden rod, *Bigelovia graveolens var. albicaulis*.

kítsōi ntsáigi, (big yellow twig), *Bigelovia albicaulis*.

má'i chíl, (coyote plant), golden rod, *Solidago nemoralis*.

ná'óhi yiltáhi, (leaves like the bean), marigold, Spanish needles, *Bidens bipinnata*.

náéshjá ilkhéi, (like owl's claws), sneeze weed, *Helenium Hoopesii*.

nashjéidá labá'igi, (gray spider food), garden daisy, *Bellis integrifolia*.

ndiyfli, common sunflower, *Helianthus*.

ndiyfli tsós, slender sunflower, *Gymnolomia multiflora*.

ndiyfli tso, large, cultivated sunflower.

ndiyfli níchni, odorous sunflower, *Gymnolomia* (?).

ndiyfli níchnitso, large, odorous sunflower, *Helianthus Nuttallii*.

ní'tníł tsó, (big snuff), aster, starwort, *Aster canescens*.

ní'tníł ntsáigi, (large snuff), zinnia, *Zinnia grandiflora*.

ní'tníł tsós, (slender snuff), *Townsendia strigosa*.

qósh bēldéi, (spine brush), groundsel, *Senecio Douglasii*.

CONVULVULACEAE (*Convolvulus Family*).—

nāqoyá (nahuyá), the name of an unidentified plant with a fleshy, tuberous root. In some places this name is also applied to the sweet potato, which is not raised here, but is known through the whites. Many now call them

núması tso lakhánigi, sweet potato, *Batatas edulis*.

tsighájilchí, (red hair), the dodder, *Cuscuta umbellata*.

CRUCIFERAE (*Mustard Family*).—

alízh bēidzól, (it splurts the urine), whitlow grass, *Draba montana*.

azé dotfish, (blue medicine), watercress, *Nasturtium obtusum*.

azé labá'igi, (gray medicine), rockcress, *Arabis communis*.

azé hādilt'éhi, (scattered medicine), so called because it does not grow in clusters, but singly, rockcress, *Arabis Holboellii*.

azé qágai, (medicine coming out white), that is, with a white stock, *Stanleya pinnatifida*.

azétso, (big medicine), false wallflower, *Erysimum asperum*.

azétsós, (slender medicine), bladderpod, *Vesicaria alpina*, or *Phlox Douglasii*, (*Polemoniaceae*).

azétsós altélsigi, (small slender medicine), pennycress, *Thlaspi alpestre*.

chil lagái, (white plant), cabbage and cauliflower, which have been introduced by the whites. Both are varieties of *Brassica oleracea*.

nánchád asé, (medicine for swelling), *Thelipodium Wrightii*.

nánodózi, (striped seeds), pennyroyal, *Thlaspi* (?).

nashjéidá, (spider food), or hastétsi, (hair like the gods), bladderpod, *Vesicaria Fendleri*.

ostáá', hedge mustard, *Sisymbrium incisum*.

tqákhálahikhál, (spreads on water), watercress, *Nasturtium alpinum*.

tsábf (?), *Physaria*.

tsáhaltá', (a receptacle like the paunch), pepper-grass, *Lepidium montanum*.

tsáyáhatqál, (it sings below the tree), so called from the noise it produces when shaken, hedge mustard, *Brassica campestris*.

CUPULIFERAE (*Oak Family*).—

chéchil (tsétsil, tséchil, rock plant), the oak, *Quercus undulata*.

chéchil ntísi, (hard rock plant), scrub oak, *Quercus undulata pungens*.

chéchil ntízi bakhá'ë, male of preceding, *Quercus undulata brevifolia*.

Kish, alder, *Alnus incana* var. *virescens*.

Kishzhini, iron-wood, hornbeam, *Carpinus Americana* (*Corylaceae*, mastworts [?]).

CUCURBITACEAE (*Gourd Family*).—

dá'neskání, cantaloupe, muskmelon, *Cucumis melo*.

nayízi, nayfzichéf, squash, pumpkin, *Cucurbita*.

těchlyá (tějlyáni, which is eaten green), watermelon, *Cucumis citrillus*, *Citrillus vulgaris*.

EUPHORBIACEAE (*Spurge Family*).—

čhl abé' altsósigi, (slender milkweed), *Euphorbia montana*.

khétsf halchf, (red near the root), *Euphorbia Pringlei*.

nááchi azé, (pimple medicine), spurge, *Euphorbia montana*.

nashjéida, (spider food), or náasht'éhédá, (gopher food), *Croton Texensis*.

FILICES (*Fern Family*).—

já ntsílidá, (bat food), lipfern, *Cheilanthes lanuginosa*.

FUMARIACEAE (*Fumitory Family*).—

nasbdi dá, (turtle-dove food), *Corydalis aurea var. occidentalis*.

GENTIANACEAE (*Gentian Family*).—

bí' híljái, (like deer's ear), *Frasera speciosa*.

čhl behét'ól ltsóigi, (plant with a yellow root), *Frasera*.

čhl behét'ól nnézigí, (plant with a long root), *Frasera speciosa*.

ínzid čhl (ínzif' čhl, witch plant), *Gentiana affinis*.

GERANIACEAE (*Geranium Family*).—

čhólchín íltái, (leaves like those of the phlox), *geranium incisum*.

dzlí bílášhgán, (claws of the sparrow-hawk), *alfilaria*, storks-bill, pin-grass, *Erodium cicutarium*.

GNETACEAE (*Joint-firs*).—

t'ó' azé, (grass medicine), *Ephedra trifurcata*. Some mistake this for *Equisetum*, horsetail.

GRAMINEAE (*Grasses*).—

dákház láchánigi, (sweet stalk), sugar-cane, *Saccharum officinarum*.

ñ nadá (ñ bidá, horse corn), oats, *Avena*.

lóká' (dlóká', arrow grass [?]), reed, *Phragmites communis*.

lókátso, the cane-reed, *Phragmites*.

nadá, corn, maize, *Zea mays*, *Phalareae*.

ndídlídi, (scorched), so called because the seeds were obtained by scorching it, mountain rice, *Oryzopsis cuspidata*.

zéiláwbóí, (it runs into the throat), so called for its tendency to slip down the throat, wild rye, fox- or squirrel-tail grass, *Hordeum jubatum*.

bæézhó, the broom. There are several varieties of these grasses, of unidentified species. The stems grow from six to fifteen inches high, and when dry are very stiff, for which reason they are employed in making native hairbrushes and brooms. A bunch of the dried grass is tied firmly together so that the butt ends present a flat surface. A twig of cedar (gád ní'ēh) is inserted into the hairbrush as a talisman.

bæézhó, rush-grass, *Aristida oligantha*.

dlú bæézhó, (prairie dog broom), so called because it is observed to grow near prairie dog colonies, *Sporobolus cuspidata*.

tsétqá' bæézhó, (cañon broom), which is also called atsá bæézhó, (eagle broom).

bæézhó sházhí, (knotted broom), from the numerous knots on its stem.

neshchfyá bæézhó, (broom under the pines), where it is usually found.

tísh bæézhó, (snake broom).

bæézhó náneskháli, (coiled broom), from its propensity to coil around the top of the stem.

tíó', grass, hay in general; tíó' ñ ilchózhigi, grass upon which horses graze. Under this caption all forage grasses and shrubs are classified. Some are given here, others may be found under their respective order, for instance, alfalfa and clover under *Leguminae*.

tíó' díchízh, (rough grass); tíó' beétsós hulónigi, (plumed grass); tíó' dáásténi, (grass with leaves like wood); tíó' tsáhi

(tłó'tsaf, awl-grass), which is probably identical with tłó' dahíkháli; tłó'tso, (big grass); tłó' litsóí, (yellow grass); tłó'lé', (?).

tłó' nadá, (corn-grass), wheat, *Triticum vulgare*.

nishchíyá tłó', (grass under the pignons).

tsíyá tłó', (grass which grows under logs), meadow-grass, *Phragmites andina*.

tłó' tsósi, (slender grass), rush-grass, *Sporobolus cryptandrus*.

tłó' nastqási, (bent grass), grama grass, *Bouteloua hirsuta*.

hazēldái, (like squirrel food).

tłó' áshfhi, (salty grass), because of its salty taste.

tłó' qósh, (prickly grass), bur-grass, or hedgehog grass, *Cenchrus tribuloides*.

alós (Sp. arroz), rice, is known only as a cereal purchased at the stores, *Oryza sativa*.

HYDROPHYLLACEAE (*Waterleaf Family*).—

azé nchfhi háb'ígi, (gray angry medicine), *Phaselia glandulosa*.

IRIDACEAE (*Iris Family*).—

tqēl bitá lánigi, (broad, with many leaves), flower de luce, or flag, *Iris Missouriensis*.

tqēl nfyłzi, broad flag, *Iris*.

JUGLANDACEAE (*Jugland Family*).—

qááłtsédi, the walnut, *Juglans*.

JUNCACEAE (*Rush Family*).—

altqfn jíkázhi, (bow grinder), rush grass, *Juncus*.

LABIATAE (*Mint Family*).—

azé nchfhi, (irritating medicine), dragon's-head, *Dracocephalum parviflorum*; or sage, *Salvia* (?).

azé ndótézhí, (medicine which is laced), horse-mint, *Monarda*.

chál dá, (frog food), sage, *Salvia canceolata* (*Lygodesmia grandiflora*, *Compositæ*).

tłó' níchfni, (odorous grass), American pennyroyal, *Hedeoma Drummondii*.

tséki naálchízhí, (which rubs against the rock), hedge hyssop, *Lophanthus urticifolia*.

LEGUMINOSAE (*Pulse Family*),—

altqānetšéhi tsós, (slender interlocking), *Glycyrrhiza lepidota*.

azé bá'áde, (female medicine), *Lupinus brevicaulis*.

azé bá'ádě tso, (big female medicine), rattleweed, *Astragalus Matthewsii*.

azé bakhá'ě, (male medicine), *Lupinus*.

azé bakhá'ě tso, (big male medicine). The larger of the two species is always male. Reference is here made to the use of these plants as medicines in the male and female chants of arrow shooting.

azé dilqíl, (dark medicine), milk vetch, *Astragalus Mortoni*.

azé tsós labá'igi, (slender gray medicine), sensitive brier, *Shrankia*.

azé tsós ntsáigi, (large slender medicine), sensitive brier, *Shrankia*.

chí'ďá tsós, vetch or tare, *Vicia Americana*.

chíl nánesdłsi, (medicine twisting along the ground), *Hosackia Wrightii*.

chózh azé, (boil medicine), lupine, *Lupinus Lyallii*.

daagháli, (rattling), rattlepod, *Astragalus*.

děbé haichídi ntsáigi, (the larger one of those that the sheep scratch out), *Oxytropis*.

debé náťő', or debé dā, (sheep tobacco, or sheep food), *Oxytropis*.

hastqúi tsíyél, (old man's queue), prairie clover, *Petalostemon candidus* var. *occidentalis*.

má'idā, (coyote food), also called Kíshzhłni, the wild cherry, *Astragalus*.

má'í náöljíl azé, (medicine for hydrophobic coyote), *Oxytropis*.

nāāstōsi iljāi, (like mouse-ear), clover, *Trifolium errocephalum*.

nā'ōli, the bean, *Faba vulgaris*.

nā'ōli ilfāi, (leaves like the bean), everlasting pea, *Lathyrus polymorphus*.

nā'ōli numāzigi, (round bean), the pea, *Pisum sativum*. The large brown bean, or Mexican frijoles, are now raised very extensively.

nā'ō' wāi, (wā tobacco), *Psoralea tenuiflora*.

nībēshjē, (pasted to the ground), *Hosackia*.

tjō' wāigi, (wā grass), alfalfa, lucerne, *Medicago sativa*.

tjō' wā nahalfnigi, (grass resembling wā), white clover, *Trifolium repens*. The latter two are of recent introduction, and their names are taken from the resemblance of their leaves to those of the spider flower, wā'.

tqáhōlchōshi, (the forehead pops it), as the pod is easily burst when pressed to the forehead, rattleweed, *Astragalus triflorus*.

tqáhōlchōshi tsōs, a slender tqáhōlchōshi (tqá'ilchōshi).

belagāna neshchf, (American piñon nuts), peanuts, which may be purchased at the stores, *Arachis hypogaea*.

LEMNACEAE (*Duckweed Family*).—

tqātjēd, (water scum), duckweed, *Lemna minor*.

LILIACEAE (*Lily Family*).—

alchfni dā, (children's food), *Calochortus Nuttallii*.

altsfni, mariposa lily, *Calochortus luteus*.

altsfni tso, hog's potato, or death camas, *Zygadenus venenosus*.

azē tjōhi, (grass medicine), blue-eyed grass, *Sisyrinchium mucronatum*.

tjō'chfni, (smelling grass), wild onion, *Allium Palmeri*.

tjō'chfni tso, (large onion), the large, cultivated onion, *Allium cepa*.

tjō'chfni chf, (red onion), or gāge tjō'chfni, (crow's onion), the nodding onion, *Allium cernuum*.

Four varieties of yucca are mentioned:

tsázi bidé, (horned yucca).

tsázi ntqéli (sázi ntqéli, broad standing awl), Spanish bayonet, *Yucca baccata*. As the roots of this species furnish a rich lather the plant is frequently referred to as tqáláwhúsh, soap. Its fruit, too, is eaten, and the plant is then called hashkán, yucca syrup.

tsázi tsós, (slender yucca), *Yucca glauca* (Nuttall), or *Yucca angustifolia* (Pursh).

yélbítsázi, (yucca of the gods), *Yucca radiosa*; Trelease Whipplei (Matthews), or *elata* (Engelmann).

LINACEAE (*Flax Family*).—

azé ntñni labá'igi, (gray gummy medicine), *Spheralcea angustifolia*.

dinás'è chíl altsósigi, (slender people's plant), yellow flax, *Lineum rigidum*.

látqábadljol, (round blossoms), flax, *Lineum rigidum*.

LOASACEAE (*Loasads*).—

chí hálchín, (odor of chí [?]), *Mentzelia nuda*.

iltñhi, (tenacious), because its leaves adhere to one's clothes, *Mentzelia multiflora*.

iltñhi tsós, (the slender species), *Mentzelia pumila*.

LOBELIACEAE (*Lobelia Family*).—

dahitqshi ildáhi, (like hummingbird's lip), cardinal flower, *Lobelia splendens*, or *cardinalis*.

LORANTHACEAE (*Loranth Family*).—

da'tsá', (by syncope from wódá', above, basket on high), mistletoe, *Phoradendron juniperum*.

MALVACEAE (*Mallow Family*).—

azé ntñni, (gummy medicine), false mallow, *Malvastrum coccineum*.

ti dā, (horse food), mallow, *Sidalcea malvæflora*.

MORACEAE (*Mulberry Family*).—

hashkân, (the fig), which is known only as a commercial article, *Ficus carica*. See also *Phœnicidæ* and Spanish bayonet under *Liliacæ*.

NYCTAGINACEAE (*Four-o'clock Family*).—

kînædlîshi dā, (stink bug food), *Abronia fragrans*.

kînædlîshi dā hâbâ'igi, (gray stink bug food), *Abronia* (?).

tîsh-nâ'ô', (snake tobacco), four-o'clock, *Mirabilis oxybaphoides*.

tsëdîdë, (probably which works itself into the rock), four-o'clock, *Mirabilis*.

tîhigal ntsâhi, (the large one which blooms at night), four-o'clock, *Mirabilis multiflora*.

OLEACEAE (*Olive Family*).—

dinâ'ë chîl, (Indian plant), *Menodora scabra*.

ONAGRACEAE (*Evening Primrose Family*).—

azë behëtsî' hâhchf, (medicine which is red near the root), evening primrose, *Oenothera tenacetifolia*.

azë hitso, (yellow medicine), evening primrose, *Oenothera grandiflora*.

azë sâkâz, (cold medicine), *Gaura parviflora*.

azë sësî' (azë hasî, crampy [?] medicine), evening primrose, *Oenothera pinnatifolia*.

chîl lâtqâ âtsôs, (feather flower plant), willow herb, *Epilobium coloratum*.

qôsh chf'itso, (great angry spine).

qôsh chf'itsôs, (slender angry spine), willow herb, *Epilobium organifolium*.

tîhigâ'i hâbâ'igi, (the gray plant blooming at night), evening primrose, *Oenothera cæspitosa*.

tséetqá' débé chíl, (big-horn plant), willow herb, *Epilobium spicatum*.

OROBANCHACEAE (*Broom-rape Family*).—

lédólfézi, (footprints in the dirt), from its distant resemblance to a moccasined foot partly sunk into the ground, cancer root, *Aphyllon fasciculatum*.

PHOENICIDAE (*Phoenix Family*).—

hášhkan, (syrup), date, *Phoenix dactylifera*. Known to the Navaho only by the fruit bought at the stores. The same name is given to the fig.

PIPERACEAE (*Peppercort Family*).—

azé díclif hábá'igi, (gray sharp medicine), black pepper, *Piper nigrum*. Known only as a commercial article.

PLANTAGINACEAE (*Plantain Family*).—

azé ít'él (?), plantain, *Plantago gnaphalioides*.

POLEMONIACEAE (*Polemonium Family*).—

atsá nát'ó', (eagle tobacco), *Gilia longiflora*.

chólchín, (spruce odor), *Phlox cæspitosa*.

dahitqfhi dá, (hummingbird food), *Gilia aggregata* var. *attenuata*.

POLYGONACEAE (*Buckwheat Family*).—

azé níbaghánt'í', (medicine which winds through the ground), *Eriogonum alatum*.

níbaghánt'í' ntsáigi, (the large one), *Eriogonum racemosum*.

azé qá'ogízi, or álkésgízi, (twisted medicine), *Eriogonum microthecum*.

bílnaáť'ó'i, (which is mixed with the tobacco), *Eriogonum Jamesii*.

bísndōchī, (adobe is red with it), so called, probably, because

it gives the landscape the appearance of red adobe, *Eriogonum fasciculatum*.

bísndöchī bá'áde, the female species, which is smaller in size than the preceding, and is probably identical with it, *Eriogonum microthecum*.

chátfni (játfni), sorrel, *Rumex hymenosepalum, occidentale*.

lé ázē, (earth medicine), *Eriogonum*.

wólächf dā, (ant food), *Eriogonum*.

RANUNCULACEAE (*Crowfoot Family*).—

chīl ná'átłóí tso, (big winding plant), virgin's bower, *Clematis ligustifolia*.

kéhótqēli, (it spreads over the ground), larkspur, *Delphinium scaposum*, or *bicolor*. As this plant is used extensively as pollen, the plant is also called tqādīdīn dotłsh, blue pollen.

létso iljáé, (which is like the ear of a rat), buttercup, *Ranunculus cymbalaria*.

tqázhi nchīn, (turkey odor), *Thalictrum Fendleri*.

RHAMNACEAE (*Buckthorn Family*).—

bí'dā, or diné'ē chīl, (deer corn, or people's food), New Jersey tea, *Ceanothus Fendleri*.

chí'dā (?), *Ceanothus* (Fendleri [?]).

ROSACEAE (*Rose Family*).—

awétsāl, (baby's bedding), the cliff rose, *Cowania Mexicana*.

azé hōkhā, five fingers, *Potentilla gracilis*.

azé ntłni tso, (big adhesive medicine), goose-grass, or five fingers, *Potentilla strigosa*.

bis dáashchīl, (the plant which binds the rim of adobe). This plant is closely allied to mountain mahogany.

chīl ná'átłóí tso, (the big weaving plant), the prune, *Prunus domestica*. The prune is known only as a commercial article, and derives its name from its resemblance to the grape.

chó (chú'), the wild rose, *Rosa Fendleri*.

dzídzé, the choke-cherry, *Prunus virginiana*.

dzídzé díťódi, (soft berry), service-berry, *Amelanchier*.

dzídzé doķózhí, (sour berry). This name is also applied to the apricot of commerce, *Prunus Armeniaca*.

dzídzétso, (big choke-cherry), the peach, which is grown in large quantities at Cañon de Chelley, and other localities with facilities for irrigation, *Amygdalus Persica*, sub-order *Drupaceae*.

má'idá, (coyote food), the wild cherry, *Prunus demissa*, *Forestiera Neo-Mexicana*.

Ķínjil'áhi, the currant, *Purshia tridentata*.

tséésdāzi, (heavy as stone), mountain mahogany, *Cercocarpus parvifolius*.

tséésgízi, (twisted stone), June-berry, *Amelanchier alnifolia*.

SALICINEAE (*Willow Family*).—

kaí, the willow, *Salix*; kaíbaí, the gray willow.

ťis, the cottonwood, *Populus Fremontii*, or *angulata*.

ťisbaí, (gray cottonwood), aspen, or quaking asp, *Populus tremuloides*.

ťístsós, (slender cottonwood), *Populus angustifolia*.

SANTALACEAE (*Sandalwood Family*).—

chíl abé', (milk plant), bastard toad flax, *Comandra pallida*.

SAPINDACEAE (*Soapwort, or Maple Family*).—

sól, (by syncope from ilzhóli, fuzzy), box elder, *Negundo aceroides*.

sól dícl'íshi, rough elder (?).

SAXIFRAGACEAE (*Saxifrage Family*).—

belásána, a corruption from the Spanish manzano, the apple, *Pirus malus*.

belásána bitsé hulóni, (apple with a tail), the pear, *Pirus communis*. Few apples are grown in the Navaho country, and the pear is only known as the canned article of commerce.

chíl koqyéhě, (coffee plant), because formerly a beverage was

prepared from it. Usually it is called *whots'ni azé*, (tooth-gum medicine), which is the alum root, *Heuchera bracteata*.

tsé'tqá sákhádi, (clustered in cañons), *Tellima tenella*.

tsé'tlíz, (hard wood), *Findlera rupicola*. *tsé'tlíz*, hard wood, is the general term for all hard woods, like *tséésdāzi*, mountain mahogany; *chú'*, wild rose; *kinjil'áhi*, currant, and numerous others. As the *Findlera rupicola* is a hard wood plant, some use both *tsé'tlíz* and *tsé'tlíz* to designate it.

tséésdāzi (*tséésdāzi*, twisted stone), currant, *Ribes*.

SCROPHULARIACEAE (*Figwort Family*).—

azé nch'fhi tao, (big irritating medicine), beard tongue, *Pentstemon azureus*.

azé nlá'li, beard tongue, *Pentstemon glaber*.

azé qíná, or *iná'ji azé*, (life medicine), *Pentstemon ambiguus*, or *laricifolius*. Cf. also Geraniaceæ. A large variety of herbs are designated and used as *qíná azé*, healing medicine or tonic.

chách'ósh azé, (glandular swelling medicine), *Cordylanthus ramosus*.

dahitq'fhi dā tao, (big hummingbird's food), painted cup, *Castilleja integra*.

dahitq'fhi dā lābá'igi, (gray hummingbird's food), painted cup, *Castilleja parviflora*.

dahitq'fhi dā tsé's, (slender hummingbird's food), beard tongue, *Pentstemon barbatus* var. *Foreyi*.

dishch'fíd azé, (itch medicine), *Cordylanthus Kingii*.

nát'ó' ních'in, (smelling tobacco), *Castilleja minor*.

SOLANACEAE (*Nightshade Family*).—

azé d'fcl'i lich'figi, (red sharp medicine), chilli, or red pepper, *Capsicum*. The Navaho do not cultivate chilli.

b'hildē, (leaves like deer horns), ground cherry, *Physalis lanceolata* var. *lanigata*.

cló'hojilyaf, jimson-weed, or thorn apple, *Datura stramonium*.

dzil nát'ó', (mountain tobacco), wild tobacco, *Nicotiana atten-*

uata. Tobacco is used extensively in ceremonies, and the following designations are presumably due to this feature.

debé náťó', (sheep tobacco), found in malpais districts; dló'i náťó', (weasel's tobacco); kós náťó', (cloud tobacco); tlish náťó', (snake tobacco); shásh náťó', (bear tobacco), all of which are probably identical with wild tobacco.

náťó' wá'i, (wá-tobacco), designates wild tobacco found in the valleys.

hashché'dá, (food of the gods), boxthorn, *Lycium pallidum*, tribe *Atropææ*.

nátsúí, (yellow seeds), nightshade, *Solanum heterodoxum*.

numázi, (globular), wild potato, *Solanum*.

númasitso, (the big round one), the cultivated potato, *Solanum tuberosum*.

tlish dá, (snake food), nightshade, *Solanum triflorum*.

TYPHACEAE (*Cat-tail Family*).

tqél, (broad), cat-tail flag, *Typha latifolia*.

ULMACEAE (*Elm Family*).—

jílqázhi, hackberry, *Celtis*.

UMBELLIFERAE (*Parsley Family*).—

azé nlchín, (odorous medicine), peppermint, *Cymopterus alpinus*.

cháhásht'ézhi (chásht'ézhi), gamot, *Cymopterus montanus*.

chlíl hitsól, (yellow plant), carrot, *Daucus carota*.

bazaálé' (?), gamot, *Cymopterus glomeratus*.

bazaálé' tso, *Ferula multifida*.

nānodōzi, (striped seeds), caraway seed, *Carum*.

URTICACEAE (*Nettle Family*).—

kish'ishjish (g'ish'ishjish), nettle, *Urtica*.

VERBENACEAE (*Vervain Family*).—

azé hadfgai, (medicine producing soreness), vervain, *Verbena stricta*.

azé nchf'i, (irritating medicine), *Verbena Aubletia*.

VIOLACEAE (Violet Family).—

tšéj' chf, violet (?), *Viola*.

tqölchfn, (odor of water).

VITACEAE (Vine Family).—

ch'il ná'at'fó'i, (weaving plant), Virginia creeper, *Ampelopsis quinquefolia*. The same name is also applied to the grapevine, *Vitis vinifera*.

ZYGOPHYLLACEAE (Beancaper Family).—

shásh ná'tó', (bear tobacco), *Tribulus maximus*.

UNIDENTIFIED PLANTS.

The following plant names were not identified, and the transliteration only is given.

ajá kú hálch'n, whose seed has the odor of the ear (?).

át'á tso, big leaves; át'á tsós, slender leaves.

atsá azé, eagle medicine.

áwá biyalaf yilbésh, which boils the placenta.

ayán bilfzh hálch'ni, which smells of the urine of the buffalo.

áyá'af, which is standing up (?).

azé bijfch'ligi, the core of the root of which is red.

azé bfn'í', medicine of the mind, in reference to its bewitching effects.

azé dí't', thick, mud-like medicine.

azé dishóigi, plushy medicine.

azé lagaf, white medicine; azé lichf, red medicine.

bflá' áshdlá'i, five fingered.

ch'il abé' altsósigi, slender milkweed.

ch'il agháni, the plant fatal to flies, ants, moths, and the like, which alight upon it; ch'il aghánf, the deathly plant, is another species fatal to both man and beast.

dihidf'a'i, an incense.

débé kú hálchín, whose seed smells of sheep.

dínás (?); dínástso, large dínás, mesquite (?).

dziłkhélchín, the odor of a youth.

jikhélchín, the odor of a maiden.

f'nígi chíl, thunder plant; i'nélne'jíl chíl (?).

néetsá azé, pimple medicine.

nákæqtí, put into the cavity of the eye.

nakhéyili, which is whirled along.

najíshōzhi, turned on its side.

ndōchí, red downward, a plant with a large red root.

ní'tsōsi, the veins of the earth.

ní'tsōsi tso, the large veins of the earth.

silátso (shilátso), my thumb.

tqojíqūldzo, which extends out of the water.

tsíłchín íłtáhi, leaves like the sumac.

tsísdísi, coiled nose, a tree found in the San Francisco range.

wóláchí bégá, antidote for ants.

zá'hozíhi (zá'hosí [?]).

Words referring to plants and their parts.

behétíł (bikhétíł), the root of a plant or tree.

khétsí (behétsí), its base.

bitsín, its stalk; bitéfn, its pith.

bizhí', the pith (of some plants).

halgízh (dáhalgízh), or bídadí'á', its branchlets.

bitá, its leaves, which are described as ntqéli, broad; altéósi, slender, long; qōsh hulóni, prickly, etc.

chíl bitá, a blade of grass.

bilátqáhi, its flower.

bilatqá daálqaf, white flowered plants, or chíł bilátqá'igaf, the plants are in blossom (white).

bilatqá daáltsó, yellow flowered plants.

bilatqá daálchí, red topped flowers, or bilátqá'ichí, they are in blossom (red).

bilātqā dadotfīsh, blue flowered plants.

bitqāitsōi, yellow interspersed, pumpkin or melons, etc., in blossom.

bizōl, its tassel, as of corn, wheat, etc.

bōkō (bōkō), or bilāstf, its seeds. The former is used for stone fruits, apples, melons; the latter for smaller seeds.

chīl binā, plant seeds, or seed bearing plants.

chīl bichūg, or bichō', catkin of plants.

bitfōl, its vine or tendril, as of the grape, pumpkin, etc.

chīl, a plant, grass or weed.

nansē, vegetation, plants.

tō chīl, merely a plant (with no special purpose).

chīl sakhād, a cluster of weeds, a bush, tuft of grass.

chīl naskhādi, creepers, such as some gamots, wild potatoes, etc., or describing them as tō sakhād, a small cluster, or naskhād, a cluster spread out.

tsīn, a tree.

tsīn behētfōl, the root of a tree; bizfd, or bitsīn (bitsīnigi), its pith, pulp; bizās, punk (outgrowth on pine); dastqāl, exudation (from the fissure of the rind); ākhāshtōsh (bākhāshtōsh), the rind; atqāfāhi (bitqāfāhi), the inner bark; azhf' (bizhf'), dried bark fibre (as of the cliff rose, or of cedar); je' (bijē), rosin; khētsf, behētsf, base (of a tree); bagān, or bitāōz'ā', its limbs or boughs, or bīdadi'ā', its branches; bitā, its leaves; achūg (bichūg), catkins of willow, cottonwoods, etc.

īl (bi'fī), needles of conifers (and their boughs).

binā, its fruit, as chēchīl binā, acorns; neshchī binā, piñons.

halgīzh fīdeshgīzh, the fork of a tree, as tīs fīdeshgīzh, a forked cottonwood.

chīl yishdē', (yīdē, deshā'), or qashdē' (qōldē', qodēshdā'), I pick flowers, grub weeds.

chīl hanshtqā (hanētqā, hadfneshtqāl), I look for plants or herbs.

chīl behētfōl nashgēd (nasēgyēd, ndēshgōl), I dig roots.

Mosses are variously designated: dlād, a covering, or moss on stone or wood, and even meat, as atsf' dlād sēlf, the meat is musty.

tsédlād, rock-moss, lichen; tsínbā dlād, tree moss; nī'hādłād, moss covering the ground; nahasés, moss found in hummocks; chō bidá'rhā, moss of spruce.

Toadstool, or mushroom, is called abíshjā'.

ndfłkhāl, the wild gourd.

nayfzi, the squash, is designated as ábëshkhāni chō (bëshkhāni tso) in the night chant and others.

NAVAHO FOODS.

The early Navaho subsisted chiefly on corn, which to-day still furnishes their chief sustenance. Owing, however, to conditions of war and constant change of domicile, it was not always possible to obtain corn, so that numerous seed bearing plants were drawn upon for a substitute. Whenever possible, too, small patches of beans, squashes and melons were raised, which with an abundance of venison, furnished sufficient variety of diet. Water furnished the usual drink with an occasional tea made from native herbs.

At present much of this early food has disappeared. The various grass seeds are no longer harvested, and venison has been almost entirely displaced by mutton and beef. Coffee, tea and goat milk have been added to the regular fare, while modern flour and cornmeal are usually preferred to the laborious task of grinding native corn. Squashes, pumpkins, melons, beans and potatoes are raised for the table wherever conditions permit, and in many districts wheat is turned into flour for domestic purposes.

Although some of the food preparations here listed are no longer in vogue, many of them are still largely preferred to the more expensive and less substantial modern store goods. The list comprises the various food preparations of corn and esculent herbs, to which is added a list of modern foods and beverages.

The most convenient method of preparing a food was a mush or porridge, which was made of green corn or of cornmeal.

dítłógi, or lēs'á dítłógi, green corn mush baked in ashes.

Green corn is ground on the metate and worked to the consistency of stiff dough, and then imbedded in layers of corn leaves or husks. These are placed in the fire and thoroughly covered with hot embers until baked. The noise produced in grinding and slapping the green corn on the metate suggested the name, *ditłógi*, in imitation of *tlóg*, *tlóg*.

tqabijái, the three ears, is mush boiled in a single corn leaf of which three pockets or ears have been formed. The corn leaf is wound once around the finger, and the opening thus formed filled with mush (*tqá'níl*) of green corn. Just opposite another pocket is made in the same manner, while the third pocket overlaps the other two. The pockets are then wrapped with the remainder of the leaf that they may retain their shape in boiling.

ntsídöggói, which bend their tips, designates a mush of green corn, replaced into the corn husk, the tips of which are then turned down. A number of these are placed side by side into a small trench, thoroughly heated, and covered with hot embers until well baked.

Mush is frequently prepared of cornmeal, thus:

tqá'níl, stirred, is a gruel prepared by stirring cornmeal in boiling water or milk. Cedar ashes are added to the meal. At times this is omitted, when the gruel is designated as *gäd ádín*, no cedar.

tqöshchfn, born to water, designates cornmeal mixed in an equal proportion of water; *tqáskhál*, cracked (corn) with water; *tqánáshgízh*, mixed with water, a mush of the consistency of mashed potatoes; *adóla*, a very thin gruel (borrowed from the Mexicans).

tqaná'níl, re-stirred, is a mush made of saliva-sweetened parched cornmeal. This is stirred in boiling water and allowed to freeze over night, in which shape it is consumed. It was much relished in the winter months, but is at present little in vogue.

tqó ih'níl, put in water, is a porridge made of parched corn ground to meal. The water is stirred constantly while adding the meal, and the porridge is eaten after cooling.

tqa beéstlóni, tied three times, is a very stiff mush placed on corn husks, which are then folded and tied in the center and at the ends, and boiled in this shape.

The facility with which gruel was prepared suggested its use for the journey, and accordingly cornmeal was carried along for this purpose.

yistélgai, the white provision, was prepared by boiling the corn sufficiently to allow the hull to be easily removed by rubbing it on the metate and then grinding the meat to a fine meal. On journeys it could be taken in this shape, or moistened with water.

tsáibaf was a general term for provisions of meal taken on journeys. The corn was parched usually and then ground. At times it was soaked slightly and then ground, adding a pinch of salt to preserve it, in which shape the meal was designated as *tsáibaf dakáne*, the gray meal provision.

alkhánáká, sweetbread meal, a provision consisting of sun-dried morsels of sweetbread (*alkhád*) ground to meal.

lēs'á bisgá, sun-dried bread, is still made by some for the journey, though more frequently as a provision for the winter. Morsels of bread-rolls, baked in ashes, are placed on the sunny side of the hogan to evaporate, when they are stored away. In winter they are boiled in water or milk and served as a stew. These provisions for the journey are frequently designated by the general term, *tsáibaf*, or *sist'é'*, *bist'é'*, my or his provisions.

tsébánálzhó', shucks between stones, is a griddle cake made by the Zúñi. The mush is spread over corn shucks and then baked between two flat stones over a fire.

Corn also furnished the breadstuff for a variety of preparations. Saliva furnished the glucose inasmuch as a small portion of the meal was chewed previous to mixing it with the batter. When green corn could be had it was parched before grinding and boiled slightly before adding the glucose. Otherwise cedar ashes, and at times salt, furnished the only ingredients. Usually the meal or flour is kneaded to a stiff dough.

alkhād, small cubes, is a corn cake baked in small, underground ovens or pits previously heated and lined with corn husks. The dough is poured over the corn husks and covered with a second layer of them and a light layer of dirt, over which a fire is kept through the night. When thoroughly baked the cake is cut up in small squares. It is required at the vigil of the night chant, and figures also at the nubility ceremony when it is supplied by friends of a poor family.

lēhlzhōzh, lined up in the ground, is very popular during the harvest. Corn husks, filled with dough and tied at the butt and tip with yucca, are lined up in a heated trench and covered with dirt and hot coals until thoroughly baked.

nəzmāzi, round cakes, are made of green corn, and baked on the stone griddle. Milk is now frequently substituted for the water formerly used in preparing the batter.

Corn, and at present also wheat, ground on the metate, in addition to flour bought at the stores, furnish the material for the following:

lēś'ān, put in ashes, is bread of the shape of the upper millstone, and is baked in hot embers. *lēś'ā dotfīzhi*, blue bread, which has the admixture of cedar ashes; *lēś'ālgaf*, white bread, without the addition of the ashes; *lēś'ā māni*, many breads, which are made in the same manner, in the shape of biscuits, and either with or without the addition of the cedar ashes.

tsē āstē', baked on the stone, designates the well known paper bread. The batter is spread over the heated stone griddle with the hand and baked.

tsē āstē' lagaf, white paper bread, is made of white corn; *tsē āstē' dotfīsh*, blue paper bread, is mixed with cedar ashes; *tsē āstēltsoi*, yellow paper bread, contains saliva-glucose; *tsē āstē-lchī*, red paper bread, is made of blue corn without the cedar ashes.

nāneskhādi, slapped again, a griddle cake, owes its name to the manner in which the dough is passed in easy fashion from one hand to the other, and then tossed on the stone griddle to

bake. When the batter is salted they are sometimes designated by *doḱōzhi*, salted cakes. At times, too, the finger-marks of the operator are distinctly visible on the finished cake, hence the additional name, *nōgāzi*, finger-marks. Cedar ashes are frequently added to the batter, especially when made of ground wheat.

hashclézhîn bināneskhādi, the cakes of the Firegod, are four small round cakes about three inches in diameter and perforated in the center. They are baked for the Firegod, who strings them with yucca and attaches them to his right arm on the ninth day of the night chant, when he begins his slow journey from sunrise to sunset.

nānoyēzhi, which are laid or spread out, is a small cake about the size of a silver dollar, which is offered to the Sun at the wind chant by persons taken ill during an eclipse of the sun. The cake is baked on coals outside the hogan, and is offered as a sacrifice in addition to precious stones.

Kfneshbīzhi, broken braids, are small dumplings made of dough. This is rolled between the hands in slender strips, from which in turn small pieces are broken off and rolled in the shape and to the size of small marbles. These are thoroughly boiled in water, after which they are thrown out and picked up with small sticks and eaten. The customary cedar ashes may be added. *Kfneshbīzhi doḱōzhi* are salted dumplings, somewhat larger than the preceding, as the operator works as much dough as she can conveniently knead in one hand; *Kfneshbīzhi tso*, large dumplings, are made of parched corn ground to meal. In size and shape they resemble an apple, the two dents made at either end adding to the similarity. Saliva-glucose is also added to sweeten them, while they, too, are gathered and held with sticks, and preferably eaten when hot.

nadā sīṭēgo, or *lēshībēzh*, roasted corn, roasting ears, which are placed on the coals and turned occasionally until fairly well colored. *neshjīzhi*, another form of roasting ears, were left in the husks and roasted in a pit (*lēyf lēshībēzh*) and allowed to

bake until morning, when the corn was shucked (yīlzhó) and eaten.

Breadstuffs were also obtained from seeds, and various food preparations were made of esculent herbs and seed bearing plants. Thus, the seeds of some species of pigweed, tǎ'đěi, tǎ'đěiqóshi, tǎ'đěilbaf, were ground and prepared in precisely the same manner as corn. The glucose, too, was obtained by parching a handful of the seeds and chewing a portion of the seed meal. Another pigweed, tǎ'đěintǎ'zi, was usually prepared in the shape of a stiff porridge, tqánashgīsh. The seeds of the pigweed, tǎ'đěitsó, were washed previous to boiling them. The foam appearing on the surface was removed and fresh water added until no trace of foam was visible. The boiled seeds were then spread out to dry and treated after the manner of corn.

Kfeshbǎzhi, dumplings, lēs'án, rolls, and nāneskhādi, griddle-cakes, were prepared from tǎ'tso, tǎ'tsósi, tǎ'dahikhǎli, all species of mountain grass. The seeds of ndidlǎdi were collected by holding a bunch of the grass over the fire and allowing the seeds to fall at the base of a flat stone placed slantingly against the fireside. Hence the plant derived its name, "that which is scorched."

A stew, bēltsé', was frequently made of wā', bee-weed, tǎ'chín, wild onions, and hazǎlé', a gamot. These were boiled with a bit of tallow, or morsels of meat, and eaten by dipping bread into them. dzǐdzétso, dried peaches, and ná'óli, beans, were also prepared in this fashion.

The leaves and small branchlets of the bee-weed in its early growth were boiled, and after adding a pinch of salt, were served as greens. The remnants of these were allowed to dry, and were cooked in the shape of small dumplings with meat or tallow. The bee-weed was not found serviceable after attaining a considerable height owing to the difficulty in removing its pungent odor.

To obtain the use of the hedge mustard, ostsé', the seeds had to be parched in a pan or skillet. Formerly they were placed

with live coals in a basket and tossed upward until well parched. They were then ground and a soup (ātqō) or stew was prepared from the meal. The *iltfhi*, gummy plant, and *tsīghājīlchī*, the dodder, were treated in the same manner, but were used very much like dry cornmeal.

nūmāsi, the wild potato, which could be found almost anywhere, was baked or boiled. A pinch of *dlēsh*, almsgen, was added to prevent vomiting.

naqōyai, or *nahuyal*, a tuber, was prepared in the same manner, while the tuberous root of the plentiful *chahashtēzhi*, a gamot, was peeled, baked and ground, as an occasional substitute for cornmeal. *altsīni*, which resembles the wild potato, was eaten green.

jiltōi, which is sucked, was baked and the pith sucked from the stalk. Hence its name.

The fruit of the broad-leafed yucca, *tsāzī ntqēli*, is used to much advantage. When fairly ripened it is baked in hot coals, but when the seeds have fallen out the flower or fruit is placed on a large, flat stone, over a fire, and dried. After that it is ground and the meal is kneaded into the shape of small puffs, which, in turn, are slightly roasted on the stone. This done, small pieces are broken off and laid in the sun, allowing them to evaporate until practically every trace of moisture has disappeared. They are then sprinkled with water and worked into roll-cakes of various sizes. Finally, a stick is forced through the entire length of the cake, which later is removed, leaving an opening to prevent the cake from souring. As much time and labor is required to obtain the fruit in this form, many families journey to districts in which the plant is abundant, spending often as much as ten and fourteen days in the field. The finished cakes are often stored for winter. Small pieces are then broken up and mixed with water, making a thick gravy or syrup of it, which is eaten with bread, meat and other dishes. The yucca fruit or flour is designated as *hashkān*, the dried jellycake as *nesdūg*.

qōsh, the pitahaya, or prickly pear, is gathered by means of cactus pickers, qōsh bewóbéhe, or a forked stick. The thorns are removed by rubbing the fruit in the sand with the foot, after which it is cut into and sun-dried. It is usually served as a stew, bēēltsé', like dried peaches. nayfzi, or nayizilchf, the squash or pumpkin, is boiled and mashed to a stew. They are also cut into strips, which are baked on coals in the usual fashion, or they may be evaporated and stored for winter. ná'óli, beans of various kinds, are usually boiled.



Cactus Picker.

With some few exceptions native berries, fruits and nuts were not especially prepared but eaten when picked. Thus, chû', or chô, the wild rose; Kijnjſſ'āhi, the currant; dzidzé, the choke cherry; dzidzé', unidentified; dzidzé di'ódi, the service berry; dzidzé dokózhí, the wild cherry; dá'whōsh, the raspberry; dínás, unidentified; chílná'átſí, the wild grape; dá'neskháni, sugar melon; tēchīyá, green food, the watermelon; qā'ātsédi, the walnut.

dzidzétsō, the peach, is boiled or sun-dried; chíſhchín, the sumac berry, is dried, ground and boiled, as also jílqázhi, the hackberry; hóchhá' and lichfi, unidentified berries, were boiled and served as a gruel.

chéchil biná, acorns, were boiled like beans, or roasted on coals; neshchí, the piñon nut, is roasted in skillets or pots, and sometimes mashed, making a kind of butter called átſh.

After the introduction of sheep, horses and cattle, and more especially after the Navaho had settled down to a pastoral and peaceful life, mutton and beef contributed to their regular bill of fare, while horseflesh, too, was occasionally eaten. These are prepared in various ways.

The meat is at times boiled, atsf' shibézh, and the soup, átqó, is eaten with a spoon or soaked up with bread. hanígaſ (hanígá, meaning, probably, the dawn rises upon it), is a stew consisting

of whole corn and meat in a lump, which is boiled sufficiently to allow the meat to peel from the bone. It is kept boiling for about the space of a night.

Meat is also roasted and fried. *tsínbesit'égó*, roasted on a stick. The meat is pierced with a long stick and held some distance over live coals, allowing it to roast slowly. When well done a little salt is sprinkled over it, and the burnt portions are removed with a knife. *tsíd bakhá sít'égó*, roasted on coals, is the roast placed directly upon live coals; *lēshibēzh*, when the meat is placed on the fireplace and covered with live coals. The roasts are flavored with salt after baking. Prairie dogs are usually fried in this manner. After removing the entrails of the dog, the interior is sprinkled with salt and closed. It is then thrown on the fire and covered with embers, after which the hair is removed with a knife, and the dog is salted and eaten. *āsā nasdzfd*, mixed in the pot, designates morsels of meat fried in a pot.

To preserve the meat in the hot summer months it is frequently jerked, *alkfnilg'ish*, (sliced and stretched). The meat is cut in thin slices, which are well stretched and then hung on a line to cure and dry. This gives the meat a hard rind, impenetrable to the sting of flies, and may be kept indefinitely. In order to render it pliable again the jerked meat is placed on live coals for a few minutes, then sprinkled with water and pounded with a stone. It is now usually fried in lard until thoroughly permeated with it. It may also be cut up and fried in lard, and is then allowed to cool off and carried in traveling. This is known as *áchú*.

Meat is also prepared in the shape of sausage. Thus, *nāshgōsh* designates a sausage made of chopped meat with which the entrails of a sheep or cow are filled and boiled in water. Blood, too, is at times thoroughly mixed with tallow and the entrails filled with it. This is then either boiled in water, *dīl shībēzh*, or roasted on hot coals, *dīl lēshibēzh*.

Lard is sometimes obtained from melted tallow and preserved

in paunches, *aká' dolyf*, melted tallow. The liver, *azfd*, is usually cut open and baked on live coals, and is then eaten with a slice of roasted mutton tallow. Now and then the head of a sheep is baked on coals and the brains, eyes and tongue are then eaten, a dish known as *atsf lëshibézh*, meat roasted in embers. The paunch is at times used in the preparation of a soup made of crushed tallow. When thoroughly boiled the paunch is cut open and the soup is eaten by dipping bread or morsels of tallow into it. Formerly a glucose was added in the shape of chewed tallow, which accounts for the name still in vogue, *aká' ábíd bídotál*, tallow-glucose in the paunch. Tallow is also mentioned in other preparations, thus *achf bikfdesdíz*, twisted with entrails, consisting of a piece of tallow wound with entrails and roasted on the coals; *akhá'gi aká' bínt'igo*, tallow in the hide, is similar to this. By applying warm water to the sheep hide shortly after the slaughter the wool is easily removed, after which the hide is cut into strips which are then wound around a folded piece of tallow and roasted on coals. When done it is cut into slices like roll-cake.

Venison, such as of deer and antelope, is prepared in precisely the same manner as mutton and beef. The meat of the cottontail, *gá'*, and the jackrabbit, *gá'tso*, is either baked or boiled. The turtle-dove, *hasbíd*, is plucked and the entrails are removed after which it is baked on coals or fried on the stick, and a little salt added to flavor it. The yellow-bird, *tsfdiltsoi*, the snow-bird, *jádidló*, and the bluebird, *dóli*, are prepared in a similar manner. The Navaho also eat wild turkey, *tqázhi*, and at present even ducks, *nál'éhi*, to which formerly many objected. Such as are cognizant of the rites of eagle trapping, (*atsá aq'níli xhósini*), also partake of the flesh of various eagles and hawks, *atsá*, *atsóltsoi*, *gíni*, *ginitso*, etc., though the ordinary Navaho taboo (*bahád'id*) them. The crow, *gá'ge*, the dog, *lechái*, and the coyote, *má'i*, to which the Zuñi and Hopi do not object, are not touched by the Navaho because of the habits of these animals of feeding upon human flesh, (*diné iyáni*). No such objection,

however, was felt to the flesh of the bear, *shāsh*, the mountain lion, *nashdūitso*, the wildcat, *nashdūilbaī*, or the wolf, *mā'itso*. In the earlier days, too, such animals as the rat, *lētso*, the porcupine, *dasāni*, and the badger, *nahashchīd*, were frequently eaten. The usual method of preparing them was to boil or bake the venison on live coals. The meal of bear meat must be preceded by a sacrifice to the bear. Porcupine was preferred to badger, and was prepared much in the same manner as the prairie dog. After scorching the quills the entrails were removed and the interior sprinkled with salt. The animal was then covered with piñon boughs over which a huge fire was kept. Some surrounded the fire by a stone wall to insure the proper heat.

The flesh of the horse, *hī*, of the mule, *dzānæz*, and of the burro, *tqéli*, is considered the equal of turkey meat (*tqāzhi daāqihalnī bits'*, meat just as sweet as the turkey). At present horseflesh is still eaten, while the burro and mule are rarely touched.

Of the water fowl and animals, the duck has already been mentioned. The otter, *tqābaāstqīn*, and the beaver, *chā*, alone were permissable, which was true also of the turtle, *tslstqēl*, *chādaghāi*. While at present many do not object to canned fish, the more conservative still hold that fish and water fowls should not be touched in any shape or form.

Withal, the abundance of mutton and beef have practically excluded all other kinds of meat, while the facility with which flour and bread and a large assortment of canned goods may be purchased, has at present limited the various native dishes to a comparative few.

WORDS.

nadā, corn; *nadā bitā*, corn leaf; *dāātā*, corn husk; *nestā*, ripe; *ntā* (*nestā*, *dīno'tīl*), it ripens.

nadā yishqīzh (*yfyīzh*, *deshqīsh*), I pluck corn; *nadā yishdlād* (*yīdlād*, *deshdlāl*), I tear the ear from the stock; *nadā bēshdlād*

(bédllād, bédeshllāl), I husk corn, or nadā yishó (y'ishō, deshō), I shuck the corn.

nadā yishkā' (y'ikā, deshkā'), I grind corn; chlīl binā yishkā', I grind seeds; akān, flour, meal, cornmeal.

nadā tqāōshnī (tqaisēnī, tqāfdesnī), or tqā'osh'nī (tqā'isēnī, tqā'ideshnī), I knead dough; gād, cedar, juniper; gād ādin, without cedar; tēshchī, or lēshchlī, cedar ashes.

bī'ndōtāl, saliva-glucose; idtāl, it is chewed and added to it; bil'ēl'fni, baking powder.

nadā yishbēzh (shēlbēzh, deshbiš), I boil corn; nadā yistēs (sēltē', destīs), I roast corn.

tqōshchfn ishlē (ishla, adeshhlī), I prepare a stiff mush. With few exceptions ishlē is used for preparing food: tqanā'nīl ishlē, I make frozen mush; tqābeēstlōnī ishlē, I bake corn in husks.

tqā'ash'nīl (tqā'ash'nīl, tqādesnīl), I mix with water; tqā'nīl, gruel, porridge.

tqana'āshgīzh (tqā'nshēgīzh, tqā'ndeshgīsh), I make a stiff mush (cut the water [?]); tqānāshgīzh, a stiff mush.

tqō ihīsh'nīl (tqō ihī'nīl, tqō idesh'nīl), I stir in water; tqō ihī'nīl, a porridge.

bā yishkhād (yishkhād, deshkhād), I eat bread; or, lēhilzhōzh yishkhād, I eat baked corn-bread; nāneskhādi yishkhād, I eat griddle cakes; lēs'ān yishkhād, I eat roll-cakes; dīl yishkhād, I eat blood sausage; belasāna yishkhād, I eat an apple.

kfneshbīzhi yishdēl (yishdēl, deshdlī), I eat dumplings; dzi-dzētso yishdēl, I eat (a number of) peaches.

tqā'nīl yistēsē' (y'itsē', destsā'), I eat mush or porridge; bēēltēsē' istēsē', I eat a stew, of which there are various kinds: wā' bēēltēsē', a bee-weed stew; tlōchīn bēēltēsē', onion stew; dzīdzētso bēēltēsē', peach stew; or, dzīdzētso istēsē', I eat peaches stewed; hazāālē' bēēltēsē', a gamot stew; nā'ōli bēēltēsē', a bean stew.

nadā yish'āl (y'āl, desh'āl), I eat roasting ears.

ātqō yishdlā (yishdlā, deshdlī), I eat (drink) soup.

ats' yishghāl (yishghāl, deshghāl), I eat meat of any kind.



debé bitsf', mutton; bégāshi bitsf', beef; lī bitsf', horseflesh; tqāzhi bitsf', turkey meat; shāsh bitsf', bear meat; jādi bitsf', antelope meat; gā' bitsf', rabbit meat, and so on with any kind of venison.

shā nūnīl, evaporated, dried in the sun; shā nūnīshnīl (shā nīnīl, or shā nūnīl, shā ndeshnīl), I place it on the sunny side.

tīō', a grass; chīl, a plant; chīl binā, or chīl bīlastī', seeds; chīl binā nanshdē (nāīldē', dīneshdā'), I shake out seeds, tsīn, or bitsīn, its stalk; bitsīn, its pith.

yīnshbē' (yībī, yīdeshbēl, or yīdeshbīl), I gather, pick fruit; dzidzētso yīnshbē', I pick peaches; chīl binā yīnshbē', I gather seeds; hashkān yīnshbē', I gather yucca fruit; qōsh yīnshbē', or qōsh whōshbē (yībī, yīdeshbēl), I pick cactus; qōsh bewōbēhe, cactus pickers.

nēsdūg, dried yucca syrup; jīndūg, it is pressed in a heap; nīshdūg (nēldūg, dīneshdō'), I make a heap of it with my hands.

atsf' alkīnīshgesh (alkīnīlgīzh, alkīdīnēshgīsh), I slice and stretch, I jerk meat; alkīnīlgīsh bānāstī', a line of jerked meat; alkīnīlgīsh bānāshītī' (bānsēltī', bāndēshtī'), I hang jerked meat on a line; alkīnīlgīsh sagān, the jerked meat is dried: atsf' itsēd alkā' bīnāsnīl, jerked meat pounded and fried in lard; āchū, cooled fried jerked meat.

āsū na'āsīd (nsēzīd, ndēsīl), I mix morsels in a pot.

atsf' yīshbēzh, I boil meat: atsf' yīstēs, I roast or boil meat.

COMMERCIAL ARTICLES.

ba, bread; ba dākhāi, square bread, crackers; ba lukhānigi, cake; basdēl (Sp.), pie; mandegīa (Sp.), butter; gēso (Sp.), or abē' neskl', cheese.

yādīzīni, which stands erect, canned goods, a tin can; belasāna (Sp.), apple; bitsē hulōni, or belasāna bitsē hulōni, the apple with a tail, canned pears; dzidzētso, canned peaches; chīlnā'ātīōi, canned grapes; chīlnā'ātīōitso, prunes; hashkān, figs, dates; dzidzē dokōzhi, apricots.

ch'il, lettuce, or any unknown vegetable; ch'il la ráigi, cabbage, cauliflower; ch'il lichfigi, a tomato, radish, beet; ch'il litso lakhán-igi, an orange; ch'il litso dokózhigi, a lemon.

númasitso, a potato; númasitso lakhánigi, a sweet potato.

dákáz lakhánici, or akház lakháni, sugar cane, syrup.

alós, (Sp.), rice.

ná'óhi numázigi, peas.

alkédisi, candy; alkédis (alkiséldiz, alkidesdis), I twist it.

áshí, salt; áshí lakhán, sugar; azē díchí, pepper.

BEVERAGES.

tqólbaf (tqólbáhi), grayish water, is a native intoxicant brewed from corn, and probably of Chiricahua-Apache introduction. Matured or slightly matured corn is buried until it begins to sprout, after which it is ground to a very fine meal. To this herbs are added with water, and the mixture is then boiled for four or five days, after which it is put aside again to cool off. Fermentation soon sets in, and the sediment of corn and herb mixture collects at the bottom of the kettle, while the gray fluid, tqólbaf, is gathered from the surface for drink. It is said to be very intoxicating, and was brewed in the fall and spring of the year.

Owing to the facility, however, in obtaining whiskey at close range and less expense and labor, the native beverage is rarely made at present. In addition, the Navaho are very fond of whiskey, and purchase it almost at any price, especially at their public dances, where women usually carry on a lively traffic. Ordinarily a drunken person is not abused or molested, and no disgrace seems to attach to habitual drunkenness. Beer, wine and cider are not despised, while soda pops are in some demand.

Coffee and tea, with sugar and goat milk, are served at every meal.

tqó, water; ashdlá (eshdlá, adeshdlí), I take a drink; yishdlá (yishdlá, deshdí), I drink it; shánákhá, or shaúxid, give me a

drink; *nānshkhá* (*nānākhā*, *nādeskhá*), I give you a drink; *nā'nsf* (*nā'nfzid*, *nā'desil*), I pour it out for you.

tqólbaf, corn whiskey; *nadá dínségo*, sprouting corn.

nnælāghāsh (*nænælāghāzh*, or *nnælāghāzh*, *ndfnōlāghūsh*), it ferments.

tqódilqil, dark water, whiskey; *tqódilqil*, or *tqólbaf yishdlá*, I drink whiskey, or corn whiskey; *tqódilqil altqahídizid*, a cocktail; *tqódilqil altqansid* (*altqaúizid*, *altqádesil*), I mix a cocktail.

tsí'deyá, or *tqódilqil* (*tqólbaf*), *ye tsí'deyá*, he is drunk with whiskey.

jódlá, or *odlá*, he drank too much, he is drunk; *shil náhodayá*, I am dizzy from the effects of drink.

náshkhūi (*nsékhūi*, *ndeshkhō*), I vomit.

yoádish'á (*yoádf'á*, *yóádidesh'ál*), I put it aside, I quit drinking.

koqyé (*koqwé*, *kofwé*), coffee; *chil koqyéhe*, or *dě* (Sp.), tea; *abé'*, milk; *bizhé hulóni*, beer; *chilná'atl'oi bitqó*, wine; *belasána bitqó*, cider; *dilchóshi*, or *tqó dilchóshi*, water which pops, soda pop; *tqózis*, a bottle.

COOKING UTENSILS.

Cooking utensils were very meagre owing to the nomadic and predatory life of the Navaho. Ovens were not in use, excepting the underground oven mentioned previously, for baking corn. In modern times ovens, similar to those in use among the Pueblos, have been introduced for baking purposes. Mush and stews were boiled in earthen bowls, and gourds or earthen spoons of convenient size were used as dippers. The mush or stew was stirred by means of slender sticks made of black greasewood (*duwúzhishzhfn*), and in odd numbers, from one to eleven, some preferring the larger number to the lesser for convenience.



Cooking Pot.

Corn was ground on the millstone, consisting of a large, flat stone, upon which the corn was rubbed and ground by means of a smaller, slightly rounded stone of oblong shape. At present the millstone is used for grinding corn, and at times also for coffee, though coffee-mills are purchased at a very moderate cost. A flat stone is still largely used as a griddle for frying cakes and paper bread, though much bread is also bought, and modern pans, pots and skillets, too, are quite general.

Dishes, in the shape of plates, knives and forks, are not considered indispensable, and the old custom of eating from a pan or bowl, and using the fingers, is even at present not objected to. Two or three will also share in a single cup of coffee when cups are not plentiful. Gourds, earthen cups, burnt out pine warts, or a worn and hollowed millstone chipped down to a convenient size, furnished fairly convenient drinking vessels, all of which have long since been displaced by china and tinware.

khûkê' (khûnfkê'), the fireplace.

tsédashjē, the metate, lower millstone; tsédashchîni, the upper millstone.

āsā', the cooking pot; tsétēs, the stone griddle.

hashtfīsh lētā', earthen bowl.

hashtfīsh adē, an earthen spoon; adē, the gourd dipper; tsīn bizēs, pine wart; beēlkā, cup made of the worn millstone; bē'idlāni, a drinking vessel; beqa'fzhāhi, a cup.

adēstsīn, the stirring sticks.



Stirring Sticks.

bēs'ēsā', a pot, pail, bucket; bēsh bēibēzhe, or bidā hulōni, a coffee-pot; bitsē hulōni, a skillet or griddle; beshbīkhū'i, a stove; lētā', a plate, saucer; besh, a knife; bilātqāi, a fork; bēsh'idē, a spoon.

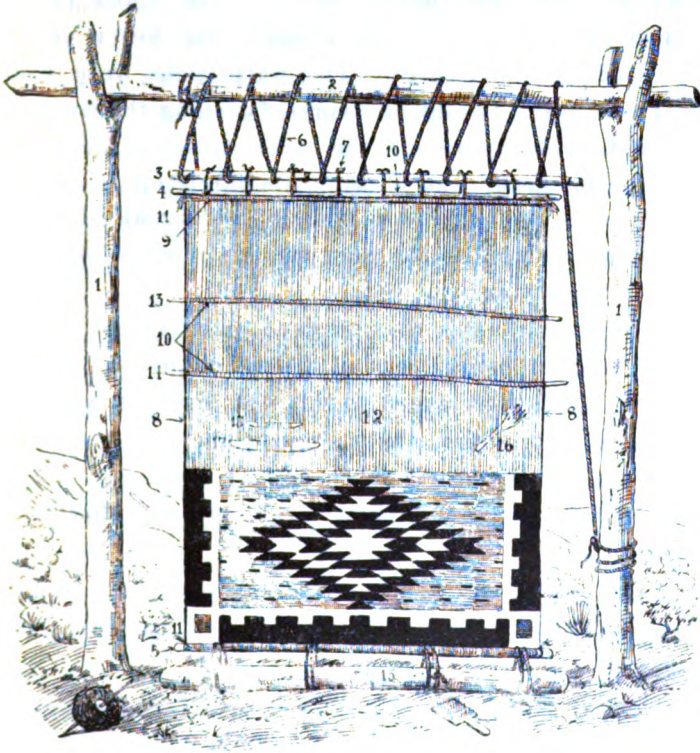
SAYING GRACE.

Meals are still served on the floor of the hogan. In the early days the meal was preceded by grace, which was said by the head of the family. The stirring sticks were removed and cleaned, and an invocation made while holding the sticks upward. This was considered indispensable at a time when the Navaho relied completely upon the yield of corn and herbs, whereas at present every one should be in a position to provide for his own without the assistance of the Unseen. The custom, however, has not entirely subsided.

adéstsīn, the stirring sticks; sódiszīn (sōdázīn, sōdideszī), I say grace, pray.

koqyé shibézh, the coffee is boiled, the meal is ready.

Arts and Industries.



WEAVING.

Weaving has been carried to a high degree of perfection by the Navaho. The art as it exists among them to-day is not an invention of their own, as nothing similar is found among any other tribe of the Athapascan stock. It is pretty safe to say that the Navaho learned the art of weaving from the Pueblos.

Their own legends, however, account for it in their own way. The *hanełnéheké hanf*, or moving upward chant legend, records that the art of weaving was taught by the Spider Man and Spider Woman in the following manner.

“The Spider Man drew some cotton (*ndaḱá'*) from his side and instructed the Navaho to make a loom. The cotton-warp was made of spider-web (*nashjéi bitłól*). The upper cross-pole was called *yábitłól* (sky or upper cord), the lower cross-pole *nl'bitłól* (earth or lower cord). The warp-sticks were made of *shábitłól* (sun rays), the upper strings, fastening the warp to the pole, of *atsfultłish* (lightning), the lower strings of *shábitłájlchí* (sun halo), the heald was a *tsághadíndfni ísēnł* (rock crystal heald), the cord-heald stick was made of *atsólághál* (sheet lightning), and was secured to the warp strands by means of *nłtsátłól* *bildestłó'* (rain ray cords).

“The batten-stick was also made of *shábitłájlchí* (sun halo), while the *bēidzói* (comb) was of *yólgał* (white shell). Four spindles or distaffs were added to this, the disks of which were of cannel-coal, turquoise, abalone and white bead, respectively, and the spindle-sticks of *atsfultłish* (zigzag lightning), *hájilgish* (flash lightning), *atsólághál* (sheet lightning), and *nłtsátłól* (rain ray), respectively.

“The dark, blue, yellow and white winds quickened the spindles (*beedfzi*) according to their color, and enabled them to travel around the world.”

Presumably, this legend accounts for the now vanishing tradition that weaving should be done with proper moderation. Overdone weaving (*akéitłó*) is ameliorated by a sacrifice offered to the spindle (*beedfzi*). Its prayerstick (*biketán*) consists of yucca, precious stones, bird and turkey feathers, tassels of grass (*tló'zól*) and pollen, and forms part of the blessing rite (*hozhoji*). The *hacheyatqéi*, or *chāyātqéi* (prayer to the gods), is recited with the sacrifice. The custom withholding maidens from weaving before marriage, which was formerly observed, is also explained by the fear of overdoing weaving. Little

or no attention, however, is paid to this tradition to-day.

In 1849 Lieut Jas H Simpson had this to say about the Navaho blanket: "It seems anomalous to me that a nation living in such miserably constructed mud lodges should, at the same time, be capable of making probably the best blanket in the world." He then quotes the words of Gregg on the same subject: "They (the Navahos) now also manufacture a singular species of blanket, known as the Serape Navaho, which is of so close and dense a texture that it will frequently hold water, almost equal to gum elastic cloth. It is, therefore, highly prized for protection against the rains. Some of the finer qualities are often sold among the Mexicans as high as fifty or sixty dollars each." And in the Indian Commissioner's Report of 1854 we read: "They (the Navahos) are the manufacturers of a superb quality of blankets that are waterproof, as well as of coarser woolens."

These quotations show that more than sixty years ago the Navaho blanket was an object whose quality and artistic execution excited the attention and appealed to the æsthetic tastes of cultured and educated men. Nor is the modern Navaho blanket behind its predecessors of sixty or seventy years ago, but has rather improved since then, although its reputation has suffered a little in late years by coarse, inferior work, made to sell, and by the introduction of strange, sometimes hideous colors. However, blankets of that kind are not and never have been the rule, and wherever traders and buyers refuse them, and insist upon getting good ones, poor blankets are seldom found. The Navaho is a trader by nature and instinct, and if he sees that he can get an equally good price for an inferior and poor article, as he can for one upon which he has expended much care, time and labor, he will do just about what his palefaced brother would do.

But, despite all this, the Navaho blanket to-day is the only thing of the kind in the world. No other people, white, red, black, brown or yellow turn out a textile fabric that can be placed beside it. It is true, oriental rugs are woven in much

richer patterns than the Navaho blanket, but, while the former bewilder the eye by their over-rich and over-crowded designs, the latter, by their very barbaric simplicity of design and well chosen colors, please and rest the eye at the same time.

In the following paragraphs an attempt is made to describe the making of the Navaho blanket in all its details.

SORTING THE WOOL.—After shearing, the wool is carefully sorted. All coarse and long-haired wool is put aside to be used for the warp-strands. The less coarse wool is then separated from the very fine or very short-haired. The latter is not used for weaving, but is sold or used otherwise. If any burs be in the wool, as is often the case, they are picked out while sorting.

āghā altsādashjól (altsādashéjól, altsādashjól), I sort (separate) wool.

āghā altsā nádashjól, I resort the wool, or sort the wool again.

tqanātséhi āghā bawoshbé (bayfī bayideshbél), I pick burs out of the wool.

āghā díclízh, coarse wool; āghā ilzhóli, less coarse wool; āghā zaf, very fine, short wool.

WASHING.—The wool, having been sorted, is spread upon a slanting rock. Water, into which soap or yucca root has been put, is brought to boil, and poured while hot upon the wool. This is repeated until the wool is thought to be clean. The hot water takes the dust, sand and grease out of the wool, and running from the slanting stone, carries it off. The wool is then allowed to dry in the sun, either on the slanting rock, or spread over bushes. If it is not considered clean enough the washing process may be repeated. Owing to the scarcity of water, and the rarity of sheep dips, and to the fact that the sheep are never kept under cover, but always in the open, the wool, as a rule, when taken from the sheep is not very clean, and may require more than one washing. The washing of the wool is very seldom neglected, since unwashed wool will not take the dye readily,

and if the blanket is woven in natural colors it can not be easily sold or disposed of if the wool is still dirty or greasy. In washing wool the saponaceous root of the yucca plant is preferred to soap, and since there are no greasy or fatty substances in it, it is said or believed to have a greater cleansing power.

In the last few years the Government has established sheep dips in various places on the Navaho reservation, which greatly aid in keeping the sheep clean, as the Indians are compelled to dip their sheep at certain seasons.

āghā yisgīs (sāēgis, desgis), I wash the wool.

āghā naneisgīs (nasāēgis, nadesgis), I wash the wool again.

āghā chqīn (bichqfn) dēya, dirty wool.

āghā akā' dēya, greasy wool; āghā hashtlīsh dēya, muddy wool; āghā lēsh dēya, dusty, dirty wool; āghā saī dēya, sandy wool; āghā tlō' dēya, wool full of hay; āghā tqō dēya, wool full of water, wet; āghā tqanātsēhi dēya, wool full of burs.

āghā nastsā (nāltasā, nādestsī), I dry the wool.

āghā nanastsā (nānāltasā, nnādestsī), I dry the wool again.

āghā yiltasā, dried wool.

nādishbāl (nādēlbāl, nādideshbāl), I spread it (over bushes).

debē tqanāgis, a sheep dip.

debē tqanāsgis (tqānsāgis, tqāndesgis), I dip sheep.

CARDING.—After the wool has been washed and become dry it is gathered up and put into a sack. When a woman has made up her mind to weave a blanket she takes the wool out of the sack, a handful at a time, and begins to loosen it up by pulling it apart with the fingers, as the water has caused it to become matted in places. Each handful is then placed between two wool-cards, with which the wool is combed from one card to the other, until the hair all lie in one direction. These wool-cards are of modern construction, can be bought at the stores, and consist of a thin rectangular piece of wood, about four by seven inches in size. On one side a short wooden handle is attached, while the other side is covered with leather con-

taining fine wire teeth. They look something like a large, square hairbrush, with the handle attached to the back and sticking out on the side.

āghā āzis biyishjól (biyíljól, bideshjól), I put wool into the sack; āghā āzis qāhastšód (qāhātšód, qāhidestšól), I take wool out of sack (small quantity); āghā āzis qāhashjól (qāhájól, qāhideshjól), I take wool out of sack (large quantity).

nadestší (nadíltší, nadidéstší), I pull (pinch) apart.

béqanílchādi, wool-card.

āghā qānīshchād (qānílchād, qādīneshchāl), I card (loosen) wool; āghā qānānīshchād (qānanílchād, qānadīneshchāl), I card the wool again; āghā qānolchād, carded wool.

āghā daníjól, or danímas, matted wool.

SPINNING.—Now comes the spinning. Spinning in Navaho style is a long and tedious piece of work. Although the spinning wheel was introduced and used at an early date by the Mexicans of the southwest, and although the Navaho had often seen them use it, and had plenty of occasion of buying, constructing or of acquiring spinning wheels, yet their imitative inclination did not assert itself in this particular point, but they preferred and held on to the tedious, tiresome distaff of the old Pueblos.

This distaff or spindle consists of a smooth round stick, about two feet in length, pointed at both ends, and of a whorl, a small, round, flat disk of wood about four or five inches in diameter, with a small hole in the center. The stick is passed through this hole and the whorl is securely fastened about five or six inches from the butt end of the stick. The stick of the distaff is usually made of a twig of *kinjíl'áhi* (currant), although any other stick or twig of hard wood may answer; the whorl is made of any kind of *tšín nēhshjí* (board or lumber).

The woman does her spinning, as also all her other work which does not necessarily require a standing position, sitting, or rather squatted Turk fashion or tailor style, upon the ground.

In spinning, she takes the distaff in her right hand and a piece of the carded wool in her left. The top end or tip of the distaff is stuck into the wool, and with a few turns it catches fast in it. By pulling and working the wool with the fingers of the left hand it is stretched out into a long strand; at the same time the distaff is twirled with the fingers of the right hand. The distaff rests during this operation with its butt or lower end upon the ground and is in a straight line, or nearly so, with the strand of wool. After the bunch of wool has been lengthened and straightened out, or the strand has reached the length of the woman's arm, the distaff is brought into an acute angle with the strand, and while the woman keeps on turning it, she winds the strand up and down upon the stick. This is repeated until the stick becomes quite bulky, when the wool is unwound from the stick, wrapped into balls, and put aside. This process is repeated as long as the wool lasts, or until the woman thinks she has enough.

For ordinary blanket purposes the wool is usually spun three times. After the first spinning a thick, loose, fluffy strand is obtained. This is not in a shape to be used for weaving, and is therefor spun a second time, when a pretty loose but firm strand, about as thick as a little finger is produced; this is the woof yarn. Another spinning gives a tight, strong, bristly cord about as thick as ordinary binding twine; this is used for the warp. Of course the quantity of yarn depends upon the size of the blanket the woman intends to weave, also upon the firmness and compactness of the blanket, which may make still another spinning necessary.

asdz (**ásédiz**, **ádesdís**), I spin.

ághá yisdiz (**sédiz**, **desdís**), I spin wool; **na'asdz** (**na'ásédiz**, **na'ádesdís**), I spin again, respin; **ághá nasdz** (**násédiz**, **nádesdís**), I respin wool.

beédízi, distaff or spindle (with which one twirls or twists).

beédízi bitsfn, handle or stick of the distaff.

ághá qahasdz, loosely spun yarn (after the first spinning).

qahasdís (qahádíz, qáhidesdís), I twirl or twist out (refers to the first spinning); ághá qa'ísdis (qayáédíz, qádiyeesdís), I spin or twist out wool (refers to the first spinning).

ághá qahastsód, tightly spun yarn (after the second spinning).

qahastsód (qaháłtsód, qāhidéstsól), or ághá qa'ístsód (qayéłtsód, qādiyéstsól), I stretch the wool out (refers to the second spinning).

ághá nánolzhé, warp yarn (after the third spinning).

ághá nismás (nésmás, dñesmás), I wind wool into a ball.

ághá nłmás, a ball of wool.

nánolzhé yisdíz, I spin the warp.

COLORS AND DYES.—After spinning the wool is either left in its natural color or dyed any desired color. Sometimes the wool is dyed before spinning, but, as a rule, it is first spun and then dyed. Undyed wool is distinguished according to its natural color, into black, white, gray, etc.

Dyes are of two kinds, native and artificial. Owing to the very elaborate and careful process in preparing some of the Navaho dyes, American dyes have been introduced, and are at present used almost exclusively in blankets made for the American trade, while for their own use many insist upon blankets woven of native colored wool. Since many colors of modern invention were unknown to the Indians, they had no idea of putting them harmoniously together with their known colors, in consequence of which one sometimes sees blankets which have been fittingly designated by some writers as hideous.

The following is a list of colored wool and dyes.

ághá al'á at'éli, all kinds of wool.

ághá łágal, or agháłgal, white wool; debé łágal bāghá, or debé-łgal bāghá, white sheep's wool; ághá łizhłni, black wool; debé łizhłni bāghá, black sheep's wool; ághá łábá'i, or agháłbá'i, gray wool; debé łábá'i bāghá, or debéłbá'i bāghá, gray sheep's wool.

ághá łichł, or ágháłchi, red wool, dark wool with a reddish tinge; debé łichł bāghá, or debéłchi bāghá, red sheep's wool.

- āghá dotłfzhi, blue wool, a mixture of black and white.
 bēilchfhi, red dye, with which it is made red.
 bēiltsóí, yellow dye, with which it is made yellow.
 bēiljfi, black dye, with which it is made black.
 bēēditłfzhi, blue dye, with which it is made blue.
 dinłchfigi, reddish, or red-brown color, also used for brown,
 and sometimes even for orange.
 dinłchf bēilchfhi, reddish, red-brown (brown or orange) dye.
 tqátłid nahalfnigi, green color, which resembles water scum.
 tqátłid nahalfni bēēditłfzhi, green dye.
 tsēdídē nahalfnigi, purple, which resembles a tsēdídē, or four-
 o'clock; tsēdídē nahalfni bēilchfhi, purple dye.
 tsín beyilchf nahalfnigi, a deep, dark red color, which resem-
 bles the tsín beyilchf, a plant from which a deep, rich (ox-blood)
 red color is obtained; tsín beyilchf bēilchfhi, deep, dark red dye.
 debélchī nahalfnigi, like red-brown sheep.
 debéłbá'i nahalfnigi, like gray sheep.
 tsítłól nahalfnigi, or bēēdiltłfsh, indigo; bēēdiltłfzhi lizhnigi,
 navy blue; debé lichf nahalfni bēilchfhi, reddish-brown dye.

There are no special names for the analine or other artificial dyes, if a distinction is necessary this would be expressed by prefixing the word *belágána*, American.

DYEING OF THE WOOL.—For making native dyes the Navaho dyer needs the vegetable and mineral ingredients required for the specific dyes; a pot in which to make the decoction of barks, flowers, twigs or roots, for which their own native pots are preferred, probably because the acid of the mordants will not act chemically upon earthen vessels as it will upon tin or iron; a skillet, or frying pan, to prepare certain of the ingredients, and a few thin, slender sticks to immerse the wool with, or take it out of the dye, and to spread it out to dry.

Each dye consists of at least two ingredients, a coloring matter and a mordant, usually some acid substance to fix the color fast.

BLACK.—To make this dye the twigs, with leaves and berries of tsfichin, or Kí, are gathered and crumpled together into small bunches. A pot of water is put over the fire and as many of the bunches as possible crowded into it. This is brought to boil and allowed to continue so for from five to six, or more hours, when a strong decoction is obtained.

While the twigs, leaves and berries are boiling some piñon gum (jé) is put into a skillet and allowed to melt over a slow fire. When melted it is strained to remove dirt and other impurities, replaced in the skillet, and brought to a high degree of heat. Then some native ochre (tsékhô), which has been powdered between two stones, and roasted to a light brown color, is slowly added to the hot gum. The pasty mass which results from this mixture must be constantly stirred since it will be spoiled if allowed to burn. Great care must also be taken that the mass does not catch fire since the piñon gum or pitch is inflammable, for that would spoil the whole mass, and the work would have to be begun anew. While thus seething and being stirred over the fire the pasty mass gradually yields up its moisture, becomes dryer and dryer, until finally a fine black powder remains. This powder, after cooling off somewhat, is thrown into the decoction of sumac, with which it readily combines, and forms a rich blue-black fluid. This continues to boil for about a half-hour when the wool is immersed in it, allowed to boil a short time, and then taken out. The color produced by this dye is a jet black, and is still used for dyeing yarn, buckskin, and women's dresses. It is a very fast color and never fades. Dr Matthews says of this dye that it is "essentially an ink, the tannic acid of the sumac combining with the sesquioxide of iron in the roasted ochre, the whole being enriched by the carbon of the calcined gum."

YELLOW.—The flowering tops of Kítsói, golden rod, *Bigelovia*, of which several species grow in the Navaho country, are boiled in water for about six hours, until a decoction of a deep

yellow is produced. When the dyer thinks the decoction is strong enough she heats over a fire, in a pan or earthen vessel, some native allogen called *tsë dokôzh*, saline rock, a kind of native alum or rock salt, until it is reduced to a somewhat pasty consistency. This she adds from time to time to the decoction, and then puts the wool in the dye to boil. Ever and anon she inspects the wool, until in about one half-hour from the time it was first immersed, it is seen to have assumed the proper color. The tint produced is nearly that of lemon color.

Another process of making a yellow is a decoction of the root of a plant called *châtñi*, or *jâtñi*, with *tsë dokôzh*, native alum or salt rock. *châtñi* is a plant, or rather a weed, belonging to the *Pogonaceae*, or *buckwheat family*, of the species *Rumer*, commonly called dock or sorrel. Dr W Matthews calls it *Rumer hymenosepalum*, and Dr Geo H Pepper says it "is commonly known as *canaigre*." It has a long, fleshy tap-root, not unlike a slender parsnip, throws out a dense bunch of almost lanceolate leaves, from the midst of which there rises a slender stem, sometimes two or three, with a long spike of blossoms and seed. The plant is a perennial and besides multiplies fast by seed. It is difficult to eradicate, which can be done only by digging out the root.

The fleshy roots of this plant are gathered, bruised on a metate or between two stones. While the crushing is going on *tsë dokôzh* is added and ground with the roots into a paste. The cold paste is then rolled between the hands and rubbed and worked into the wool. If the wool does not seem to take the color readily a little water is dashed on the mixture of wool and paste, and the whole is slightly warmed. The entire process does not occupy over an hour, and the result is a color much like that known as old gold. This process was witnessed and described by Dr Matthews.

Dr Pepper describes a third process of making yellow dye, in which the bruised roots of *châtñi* are boiled and *tsë dokôzh*

added during the boiling. The wool or yarn to be dyed is boiled in this solution.

RED.—This is a purely vegetable dye, all the ingredients being plants or parts of plants. To make this dye the woman first burns some twigs of the juniper tree, *Juniperus occidentalis*, called gād. The root of tséésdāzi, *Cercocarpus parvifolius*, a kind of mountain mahogany, are crushed and boiled. To this is added the juniper ashes and the powdered bark of the black alder, *Alnus incana* var. *virescens*, known as Kish, together with a plant called n'ḥādłád, a moss, which acts as a mordant. After this mixture has boiled until it is thought to be right it is strained and the wool or yarn is soaked in it over night. The result is a fine red color.

The dull reddish dye is made of the powdered bark of Kish and the root bark of tséésdāzi, which makes a fine tan color on buckskin, but produces a rather pale shade on wool.

The brilliant red which constitutes the ground color of many of the older Navaho blankets was made entirely of bayeta. Bayeta is a very bright scarlet cloth, much finer and more brilliant than the scarlet of the Indians. It was originally brought into the Navaho country from Mexico by the Spaniards. The Navaho unraveled this cloth and reweave it into their blankets. In 1881 Dr W Matthews wrote that "the Navajos were still largely using bayeta, which was being supplied to the trade from our eastern cities. Since then the American yarn has become pretty popular with the Navajo weavers, and many very beautiful blankets are now made wholly or partly of Germantown wool." Since this was written the bayeta has been totally replaced by Germantown yarn and analine dyes.

In former years the Navaho had a native blue made of adish-tłsh, a kind of blue clay which was pulverized and boiled with sumac (kí) leaves to obtain a mordant. Later this was entirely superseded by indigo (bēēdiltłsh) obtained from the Mexicans. Urine, preserved in large Zuñi pots, was used as a mordant into which the indigo was poured and the wool dipped. This was

then allowed to stand from five to ten days after which it was removed from the vessel and after drying was ready for use.

Green was made by mixing the native yellow with indigo; orange, of the root of the dock or sorrel mentioned above.

The store dyes, or analine dyes, are prepared by dissolving the dye-stuff thoroughly in a cup of water, which is then poured into a pot of boiling water. The wool or yarn is moistened before being dipped into the solution.

For dipping and extracting the wool the woman makes use of two thin, slender sticks.

āghā daaldīn yisdīzigi, already spun yarn.

chīlchīn (kī) yishbēzh (shēlbēzh, deshblsh), I boil the sumac.

jē yistēs (sēltē', destīs), I roast the gum.

tsékhô yistēs (sēltē', destīs), I roast the ochre.

jē, gum, pitch; jē tqashnīl (tqānīl, tqādeshnīl), I mix the gum.

jē tsékhô bīl tqashnīl, I mix the gum with the ochre.

jē diltā, the pitch caught fire, burned.

tsékhô, ochre; tsē dokōzh, a kind of native alum or rock salt.

chātīni (jātīni), dock or sorrel; tséēsdāzi, mountain mahogany; tséēsdāzi behētōl, root of the mountain mahogany; tséēsdāzi behētōl bakhāgi, mountain mahogany root bark; tséēsdāzi bitqô, mountain mahogany juice or decoction.

gād, juniper; gād didlīd, burnt juniper, juniper ashes; kīsh, black alder; kīsh bakhāgi, alder bark; kīltsōi, golden rod; nī'hadlād, moss.

bi'ijfhi, pot in which black dye is boiled; bi'ilchfhi, vessel in which red dye is boiled; bi'iltsōi, pot in which yellow dye is boiled; bi'iditīfzhi, pot in which blue or green dye is boiled.

ishī (ishī, ideshīl), I dye black; na'ishf, I dye black again; āghā yishf (yīshī, yideshīl), I dye wool black; āghā naneishf, I dye wool black again.

ishchf' (ilchf, ideshchf'), I dye red; na'ishchf, I dye red again; āghā yishchf (yīlchi, yideshchf'), I dye wool red; āghā naneishchf, I dye wool red again.

istsó (íltsoi, idétsó), I dye yellow; na'istsó, I dye yellow again; ághá yistso (yíltsoi, yidétsó), I dye wool yellow; ághá naneistsó, I dye wool yellow again.

adishtfísh (adíltfízh, ádídeshtfísh), I dye blue; ághá dishtfísh, I dye wool blue; ághá nádishtfísh, I dye wool blue again; nádishtfísh, I dye blue again.

tqátlid nahalfngo adishtfísh, I dye green; tqátlid nahalfnigi ashlé, I dye (make) green.

debélchí nahalfngo yishchí, I dye the color of red-brown sheep.

debélchi nahalfnigi ashlé, I dye (make) the color of red-brown sheep.

tsédidé nahalfngo yishchí, I dye purple, color of four-o'clocks.

tsédidé nahalfnigi ashlé, I dye (make) purple.

tsín biyilchí nahalfngo yishchí, I dye a deep red color, like tsín biyilchí; tsín biyilchí nahalfnigi ashlé, I dye (make) a deep red (ox-blood) color.

ághá yilzhí, wool dyed black; ághá yilchí, red dyed wool; ághá yiltsói, yellow dyed wool; ághá díltfízh, blue dyed wool; ághá dínlíchí, pale red wool; ághá dínlíjí, pale black wool; ághá dínlítsói, pale yellow wool; ághá dínlítfízh, pale blue wool.

ághá táyísi yichí, wool dyed a bright red, very red; ághá táyísi yizhí, wool dyed very black; ághá táyísi yiltsói, wool dyed a bright yellow; ághá táyísi díltfízh, wool dyed a bright blue.

neibá', faded, it got gray again.

neigái, faded, it got white again.

béilchí bitfájani, sediment of red dye; béijí bitfájani, sediment of black dye; béiltsói bitfájani, sediment of yellow dye; béiltfízhí bitfájani, sediment of blue dye.

adestfín, stick for dipping in and taking wool out of dye pot.

ághá bíbiistsé (yéltse, diyéstse), I put (poke) the wool into the dye with the stick.

ághá qabiistsé, I take the wool out of the dye with the stick.

ághá tsín bákhá nibistsé, I spread the wool on a tree with the stick; ághá chíl bákhá nibistsé, I spread the wool on a bush with the stick.

PUTTING UP THE LOOM.—After dyeing sufficient yarn comes the important work of putting up the loom. No special ceremonies or rites are connected with the erection of the loom. Two posts or saplings (1)*, which may or may not be forked at the top end, are planted firmly into the ground. No particular kind of wood is required for them, but any poles or posts of sufficient size and strength will answer. Sometimes two trees growing sufficiently near each other are selected for this purpose, or a tree and a post, whichever is most convenient. To these two upright posts or trees are lashed horizontally two crossbeams or braces (2), one above and the other below. The lower one is either totally or partly imbedded in the ground, and is sometimes used in place of the weights, of which later.

Next the warp is stretched. This is done separately. Two poles or saplings or logs (3 and 15), whichever is handiest, are laid parallel to each other upon the ground. Near the ends of these two logs the two blanket poles (4 and 5), round, smoothly-shaven sticks, seven or eight feet long, are tied so that they form an oblong square with the logs. The warp (12) is then wound up and down, under and over these two blanket poles, in one continuous strand, in such a way that the strands form approximately the shape of a much elongated figure 8, since they cross each other at the center.

Next the end strands (9 and 11) are put on, one at the upper and one at the lower end, just next to the blanket pole. These end strands consist of a strong, tightly woven cord, which is doubled when put on, both ends being crossed over each other after every warp-strand.

The blanket poles are then pulled out of the warp and again tied to the two logs an inch or two further away, and another strong cord is wrapped spirally (7) around the blanket pole and the end strand. This done at both ends, another beam or pole (3), which might be called the yard-beam, is attached with ropes to the upper blanket pole, while the lower one (15) is similarly

*The figures in this and following refer to illustration on page 221.

attached to the lower crossbeam. The just mentioned yard-beam is then connected by means of a spiral rope (6) with the upper crossbeam, and the whole warp frame is raised to a perpendicular position between the two uprights, after having been detached from the two logs lying on the ground. The warp-strands are made taut and rigid by pulling tight the spiral rope (6) which connects the upper crossbeam with the yard-beam.

When no lower crossbeam (15) is used, or when it is not used as described above for holding tight the lower part of the blanket, either logs, stones or boxes and bags of sand or stones are attached to the lower blanket pole (5), and sometimes anchored into the ground to keep the warp-strands stretched.

Now the border strands (8) are put on, one on either side. These are two heavy, strong cords which, with the end strands, form the edge of the blanket. Usually they are made to end in a tassel at the four corners of the blanket.

After this two long, slender sticks (13 and 14), a little longer than the blanket is broad, and which might be called healds, are attached to the warp-strands. The upper one (13) lies loosely in the upper part of the elongated figure 8 of the warp, while the other (14) is attached to the outside of the warp by means of a looped string (10), by which the rear warp-strands are fastened to the stick. By pulling this heald stick, or any portion of it, towards herself, the woman brings the rear warp-strands forward beyond the front strands to pass through the yarn.

da'istlô, or yistlô, loom.

(tsIn) bada'istlô ba'ĩ'áhi, uprights; (tsIn) ádasétqâ, crossbeam.

(tsIn) da'nalô'i, or ada'nalcháhi, yard-beam.

(tsIn) bikidesdzi, or átlótsIn, upper and lower loom poles.

(tlôl) beda'istlô (bedahistlô), spiral beam rope.

(tlôl) beéqda'istlô, loom rope, by which upper blanket pole is tied to yard-beam.

abánát' (bánát'), border strands; bēildestlô, end strands.

(tlôl) bedándiltsóhi bebildestlô, looped string on heald stick.

(tʃöl) bēēkʃdesdʒi, spiral end yarns; biǰānīl, end tassels.
nānolzhē, warp.

ʃsinil (ʃsēnīl), the two beald sticks.

ādég sētqā, upper beald stick; beda'ndiltsóhi, lower beald stick; beēdāndildzoi, lower heddle.

(tʃöl) lēdastʃʃi, string by which the lower loom pole is tied to weights.

tsāzʃ lēdastʃʃi, same as foregoing when yucca fibres are used.

tsīn akʃsētqāni, "log lying on," used as weight on lower loom pole; tsīn akʃsīnʃli, two logs used as weights on lower loom pole; tsīn akʃsīyʃni, more than two logs used as weights on lower loom pole; tse akʃisetqāni (akʃsīnʃli, akʃsīyʃni), stone used as weight; ʃesh akʃisetqāni (akʃsīnʃli, akʃsīyʃni), ground used as weight.

a'setqā, or ʃsetqāni, lower crossbeam.

da'ishtʃó, I get the loom ready, am putting it up.

da'istʃó, da'hastʃó, the loom is ready.

naneshshē (na'nishshē, nadʃneshsha), I put on the warp.

adestšód (adéltšód, adídéstšól), I stretch, tighten.

nanolzhē destšód, I stretch or tighten the warp.

bēēkʃdídiz, shuttle, twig shuttle.

WEAVING.—The foundation of the blanket is now laid and the woman gets ready to build upon it. After spreading a sheepskin or a saddle-pad in front of the loom, and placing her yarns and implements within easy reach, she squats down upon the rug, just in front of the loom, her legs folded under her with soles turned upward. The warp-strands hang perpendicularly before her, and she weaves her blanket from below upward. She uses neither drawn, nor painted, nor stenciled patterns to guide her, but arranges her figures and designs as she progresses in her work, and works them out with such colors as she has on hand. Each color has a separate ball or skein of yarn, so that at times a half-dozen or more yarns are hanging down before her from the warp, but she never gets them mixed, nor makes a mistake or a miscalculation as to which one is to be used next.



Now, since she never changes her position, but retains her squatting position until the blanket is finished, it is evident that after some time, when the weaving has progressed to a certain height, further weaving will become inconvenient, or totally impossible, unless there be some contrivance attached to the loom by which the work can be kept within convenient reach. At such stages of the work the spiral rope (6), by which the yard-beam is held to the upper crossbeam, and which has been tied within easy reach of the weaver, is untied and the rope let out. The spiral loops of the rope are thereby naturally enlarged, which causes the yard-beam, and with it the whole warp, to lower down. When it has been lowered to the desired level the rope is firmly retied, a fold is made in the already woven part of the blanket, which is tightly sewed with a large darning needle or a sack needle to the lower loom pole with a stout piece of yarn. The weights at the bottom are readjusted so that the warp-strands are again taut and rigid, and the weaving is reassumed until another lowering becomes necessary.

The marks of this sewing down can easily be seen on all new blankets and often, too, on old ones. They run like a large welt across the whole width of the blanket, and may be noticeable for years, even until the blanket is worn out.

da'ishtfó (da'iyétfó, da'diyeshfó), I put up the loom.

da'istfó, the loom is up, ready.

ashtfó (asétfó, adeshtfó), I weave; beéklé yishtfó (sétfó, deshtfó), I weave a blanket; beédlé ɬa nanashtfó (násétfó, nadeshtfó), I weave another blanket.

qaashtfó (qasétfó, qadeshtfó), I begin to weave, put in first yarn; istfó bóhoshá (bohóʔán, bohidesh'ál), I am learning how to weave; ashtfó (yishtfó) bæ(qas)sin, I know how to weave.

atfó bina'nshtqin (bina'néltqá, bina'dfneshtqí), I teach weaving.

ashtfó binishtqá (binétqá, bidfneshtqá), I am practicing weaving.

chæädishtfó (adétfó, adideshtfó), I am trying to weave (but do not succeed); the past tense, chæädétfó, conveys the meaning, I am tired of weaving.

- aqosist'íd ashtló háé, I am quitting to weave.
 aláji ashtló (yishtló), I always weave.
 dáákwi ji ashtló, I weave every day.
 beéldlé ninshtló (nútló, ndeshtló), I finish the blanket.
 ashtlógo (yishtlógo) shilyaá'ts', I like to weave.
 ashtlógo (yishtlógo) do-shilyashón-da, I do not like to weave.
 náneszāgo yistló, loosely woven.
 dōhozhó náneszā-da, not very loosely woven.
 náneszāgo ashtló (yishtló), I am not weaving very loosely.
 aqinestqígo yistló, tightly woven; aqinestqígo ashtló (yishtló),
 I am weaving tight; do-aqinestqí-da yistló, not tightly woven.
 do-aqinestqígo ashtló (yishtló), I am not weaving tightly.
 qanashníl (qanáshníl, qadeshníl), I unravel.
 abá adinshkhāl (adinéikhāl, adinésikhāl), I make a fringed
 border; ajáníl ishlé, I make (put on) the end tassels.
 beéldlé do-il'nigi, or do-yaát'éhigi, a poor blanket; beéldlé il'ni,
 or yaát'éhi, a good blanket; beéldlé nt'fzigi, a hard blanket;
 beéldlé ilzhóligi, a soft blanket; beéldlé detqānigi, a thick
 blanket; beéldlé alt'áhigi, a thin blanket; beéldlé ntsāigi, a large
 blanket; beéldlé alts'isigi, a small blanket; beéldlé nnāzigi, a long
 blanket; beéldlé alts'ósigi, a narrow blanket.
 beéldle babá, the border of the blanket.
 beéldlé chōsh alchózhi seli, a moth-eaten blanket.
 beéldlé nēhēst'ód, a torn (worn-out) blanket.
 beéldlé án'idi, a new blanket; beéldlé hastqí, an old blanket.
 abá nēltqíl, or nelkāl'igi, a fringed border.
 yaādistsós (yaadiyéłtsós, yaādiyést'sós), I lower down the warp.
 yanādistsós, I lower down the warp again.
 nadists'ód (nadéłts'ód, nádests'ól), I stretch or tighten it again.
 náshkhād (naséłkhād, nádeskhāl), I sew it.
 yaādistsos náshkhād, I sew down the blanket warp.
 beéldlé nadistsós (nadíłtsós, nadidestsós), I take down the
 blanket (from the loom).
 beéldlé dahidishlé (dahidíłó, dahidídeshló), I weigh the blanket.
 beéldlé aqá'nishlé (aqá'nílá, aqá'dineshlél), I fold the blanket.

beëldlê a jâ'danishlê, I fold the blankets.

beëldlê yisdîs (sêdiz, desdîs), I roll up the blanket.

beëldlê dâisdîs, I roll up blankets.

beëldlê noshtqâd (naisêltqâ, na'idéshtqal), I unroll the blanket.

beëldlê ndoshtqâd (ndaisêltqâ, ndaidéshtqal), I unroll the blankets.

beëldlê hânîshchâd (qânîlchâd, qâdfneshchâl), I card the blanket.

beëldlê hadanshchâd, qâdanêlchad, qâdadfneshchâl), I card the blankets.

beëldlê yishshô (yîshshô', deshshô), I brush the blanket.

beëldlê yishdê (yîldê', deshâ), I clean the blanket.

beëldlê dashdê (dâldê', dadeshda), I clean the blankets.

beëldlê yishqâd (yîghâd, deshqâl), I shake the blanket.

beëldlê dashqâd (dâghâd, dadeshqâl), I shake the blankets.

beëldlê îhistsôs (îhîltsôs, îdestsôs), I put the blanket away.

beëldlê îhishnîl (îhînl, îdeshnîl), I put the blankets away.

beëldlê nahashnî (nahâlnî, nahidêshnî), I sell (or buy) the blanket; beëldlê shânâhâznî, the blanket is bought from me.

beëldlê yishtîn (sêtlîn, deshtînl), I pile up the blankets.

beëldlê sha'îltsôs (sha'îltsôs, shadoîtsôs), I borrow a blanket. (pl. nîl.)

beëldlê shayîltsôs (shayîltsôs, shâdoîtsôs), a blanket is given to me. (pl. nîl.)

beëldlê nanstsôs (nanîltsôs, nâ'destsôs), I loan you a blanket.

IMPLEMENTS USED IN WEAVING.—The most necessary and important tool or implement used by the woman in weaving is what might be called the batten-stick (benîkînlîtlîsh, usually pronounced benkînlîtlîsh) with which one rams or falls down on it. This batten-stick (17) consists of a flat piece of wood, scrub oak or any other hard wood, about three feet long, three inches wide, and a half-inch or less thick. It is shaped at both ends like the prow of a boat, and has a thin, blunt lower edge. With this batten-stick the woman separates the warp-strands by inserting it alternately between them. After the batten-stick is

inserted into a part of the warp-strands so that one-half is on either side, in alternate order, she gives it a twist which turns it flat-wise. This naturally opens the strands the width of the batten, or about three inches, which is sufficient to pass through the yarn. The yarn being thus placed in position, the batten-stick is again turned edge-wise, and with three or four vigorous downward blows it is driven tight into the bristly warp-strands.

Upon the force and energy with which the batten-stick is used depends, to a great extent, the hardness, firmness and durability of the blanket. Frequently the web is rammed down so tight as to make the blanket waterproof, so that water can be carried in it without any danger of its leaking or soaking through, or the blanket may be used for a lifetime as a floor-rug, and in such places where a whole family is obliged to walk over it several times a day with well-shod feet.

As the batten-stick is only about three feet long it will be easily understood that the yarn is never passed through the whole width of the warp at one time, but only through that space which has been opened with the batten-stick. To facilitate the insertion of the batten-stick between the warp-strands, or when it is desirable to put in a longer piece of yarn, the healds, described in a preceding paragraph, are brought into use. If the yarn is to be run through the warp-strands for some length it is wrapped around a small, slender, smooth-shaven stick or twig, which is passed through after the manner of a shuttle.

Besides the large batten-stick the woman usually has several smaller ones, sometimes as many as five or six, all of different sizes, which are used as the blanket approaches completion, when the large stick can not be used to advantage. When even these small batten-sticks can no longer be used the yarn is pushed through the warp and pressed tightly in place with very thin, long, slender sticks, or wooden needles, called *be'inaált'f'i'*.

Another important implement of the Navaho weaver is what might be called the batten-comb (*beëdzóí*), which is a combination of a comb and an awl (16). It is made of a piece of hard

wood, about six or eight inches long, one and one-half inches broad, and one-fourth of an inch thick. At one end five or six cuts are made into the wood, forming six or seven teeth or prongs resembling the teeth of a comb; the other end is whittled down to a sharp, slender point, scraped and polished off smoothly, resembling an awl. The comb end of the *beēdzōi* is used to press the yarn, after being inserted between the warp-strands, into position before ramming them home with the batten-stick. This is done by holding the instrument as one would hold a paint brush, and by striking gently downwards upon the yarn. The awl end is used either to regulate any uneven or irregular distribution of the yarn, or to loosen any part rammed too tight. The *beēdzōi* is, therefore, especially employed when making loosely woven or soft blankets or rugs.

benīkīnīltīsh, or *beēkīnīltīsh*, batten-stick.

benīkīnīltīsh altsōsigi, slender (small) batten-stick.

benitlō, very small batten-stick, used when near finishing.

be'ināāltī, long, thin polished twigs, used in place of batten-stick at the finishing of the blanket.

tsin tsōsi, wooden sticks or needles, for passing through the yarn, shuttle needles.

benāākhā, or *benāādīlō*, large darning needle, for sewing down the blanket while weaving.

beētīlō, balls or skeins of yarn of various colors, for weaving.

nikīnīshītīsh (*nikīnēltīsh*, *nikīdīnēsītīsh*), I ram down.

benīkīnīshītīsh, I ram down with it.

dāhāndīlā, very small batten-stick.

beēdzōi (*bēidzōi*), batten-comb and awl.

asdzō (*īzō*, *ādesdzō*), act of rubbing a notched stick with another.

naāsdzō, repetition of foregoing.

tsīn yīsdzō (*sēzō*, *desdzō*), I rub a notched stick.

MATERIALS OF TOOLS AND IMPLEMENTS.—As a rule no special material or wood must be used to make any particular tool or implement, and whatever is most convenient or handy is made

to answer. However, there are certain kinds of trees and shrubs whose wood is preferred if it can be had.

For uprights any posts will do, but cedar and piñon are preferred. Piñon is preferably employed for beams and loom poles. For the stick or handle of the distaff, tséésgízi, duwúzhizhín, tsítłiz or kinjíl'ai are used, while the whorl may be made of any kind of flat wood, board or lumber. For the heald sticks, kaí, duwúzhizhín, tséésgízi, tsítłiz, or any slender twig is taken. The tsín tsósi, béédzói, benítłó, be'inááłtł', and in fact all small, slender sticks used in connection with weaving, may be made of the same material as the stick or handle of the distaff, although tsítłiz is preferred. The batten-sticks are made of scrub oak, or any hard wood (tsíntłiz).

gádl, cedar; chá'ól, piñon; duwúzhizhín, black greasewood; tsíntłiz, any hard wood; tsítłiz, *Findlera rupicola*; kinjíl'ai, wild currant; chééhíl (tsééhíl), oak; kaí, willow; tséésgízi, a kind of mountain mahogany; tsín néhshjé, a board of any kind.

KINDS OF WEAVE.—On her simple and primitive loom the Navaho woman, by deft and dexterous manipulation, is able to weave blankets and rugs in five or six different styles.

1. yistłó.—This is the method described previously, in which the woof-strands are drawn horizontally through the warp and rammed tight with the batten-stick. Two healds are used in this mode of weaving.

2. yishbłzh.—This word means braided, but is used in connection with blankets to designate a peculiar figure or run of the web, which runs diagonally across the blanket, giving it the appearance as if it were begun in one corner and woven to the opposite corner. The position of the loom and of the weaver is the same as in No. 1, but more healds are used.

3. i'ímás.—This weave has a very peculiar appearance; the whole blanket seems to consist of diamond shaped fields inside

of which are other diamond shaped figures, sometimes of a different color, seemingly woven about a spot in the center. This weave, too, depends upon the number of healds used, and is mostly employed for making saddle blankets, although occasionally one sees a larger blanket woven in this style. The word *i'ímás* means, or rather designates, contiguous squares.

4. *diyúgi*, or *diyógi*.—This is really not a special style of weave since it is the same as No. 1, only that soft, loose yarn is used, which makes the blanket look thick, soft and fluffy, and that is expressed by the word *diyúgi*, or *diyógi*. Here might also be added Germantown blankets, or blankets which are woven of Germantown or machine-spun yarn, and *bayeta* blankets, in the manufacture of which the unraveled strands of the *bayeta* cloth were used. *Bayeta* blankets are not often made.

5. *ditśósi*.—This word, meaning fuzzy, downy, is applied to a species of blankets or rugs the one side of which looks very much like a long-haired sheep pelt, with the wool in small tufts. When the woman weaves this sort of blanket she has a quantity of long-haired wool near at hand. She first weaves about an inch, then taking pinches of the long-haired wool, inserts them between the warp on the top of the woven part, leaving a tuft of about two inches stick out in front. When the whole row is thus tufted she rams it down with the batten-stick, weaves another course of about an inch, inserts another row of tufts, and thus continues until the blanket is finished. When finished it has the appearance of a shaggy pelt.

6. *ałné'ěstłóni*.—This is a double or two-ply weave, which shows a different design on either side. In weaving in this style as many as eight healds are used. By manipulating them in the right way the desired result is obtained. In order to understand just how it is done one would have to see a woman at work, and pay close attention to the manner of weaving, and to the arrangement and the use of the healds.

yishtló, it is woven, regular weave.

yishbfzh, it is braided, diagonal weave.

i'mās, rounded within, a complex of squares.

diyúgi, or diyógi, soft, fluffy.

ditsósi, fuzzy, downy.

alné'estlóni, woven on both sides, a different design on either side.

yishbfzhgo ashtló, I weave in braided style, diagonally.

beéldlé yishbfzhgo yishtló, I weave a diagonal blanket.

i'māsgo ashtló, I weave in iimas.

beéldlé i'māsgo yishbfzh, I weave a blanket in iimas style.

diyúgi ághá beáshló, I weave soft and fluffy.

beéldlé diyógi ághá beyishtló, I weave a soft and fluffy blanket.

ditsósi ághá beáshló, I weave downy or shaggy.

beéldlé ditsósi ághá beyishtló, I weave a shaggy blanket.

alné'estlóni ághá beáshló, I weave doubly.

beéldlé alné'estlóni ághá beyishtló, I weave a double blanket.

tól beéstlóni, a Germantown blanket.

tól beáshló, I weave with (Germantown) yarn.

beéldlé tól beyishtló, I weave a Germantown blanket.

nakálchf qahadósigi, bayeta cloth.

nakálchf qahadósigi beéstlóni, woven of bayeta.

beéldlé nakálchf qahadósigi beéstlóni, a bayeta blanket.

nakálchf qahadósigi beáshló, I weave with bayeta.

beéldlé nakálchf qahadósigi beyishtló, I weave a bayeta blanket.

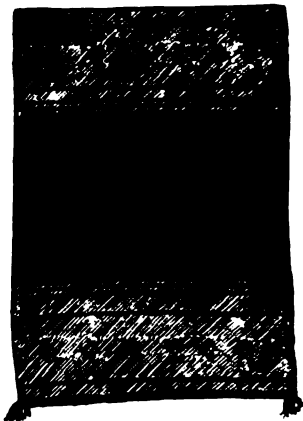
THE USE OF THE LOOM.

The following presents a list of the older blankets, and of such patterns as have given the blanket a special descriptive name. The older patterns were few in number though the design was a matter of option and varied according to taste.

bíl, woman's dress, was originally woven in black and blue. The black color, which is a fast jet black, was made from a mixture of sumac, pitch and native ochre, called tsékhó jē kí,

while the blue was indigo (*bēdiltfīsh*), obtained from the Mexicans. The top and bottom of the blanket alternated in four lines of blue and three of black, with the body of the blanket, or its center (*alnī*), a plain jet black. The whole was bordered (*bānātī*) and tasseled (*bijānīl*) in blue.

With the introduction of bayeta red was substituted for the blue in the body of the blanket, though the blue border and tassels were retained (*dotfīsh beqdotfō*, the weave runs out in blue). The solid black center, too, was retained, and gradually various designs of red and blue were woven with the black (*hizhfn bildestfō*) at each side of the center belt.



bā dotfīzhi, or *bīl babā dotfīzhi*, blue borders. This was a woman's shawl, and owes its name to the two borders of blue which flanked the center of black. While the *bīl*, or woman's dress, was of two pieces, which were sewed at the top and sides, leaving an opening for the head and arms only, the shawls were made in a single pattern and used after the manner of a shawl or wrap, much as the men use the blanket.

bīl lagaf, white shawl, was so called from the alternating white and red color which was woven horizontally in narrow strips throughout. The border and tassels were blue. It was the only woman's garment in which white was used, and was therefor appropriately designated. The woman's dress and the shawls are not used to-day though some are made for the market.

nāgo nodōzi, horizontally striped, a blanket woven in alternating stripes of black and white, with an occasional narrow strip of red added in the center, and the end belts of black. Red tassels decorated each corner.

A similar blanket, and one much in demand by the Utes, was

known as *alnî na'fjîni*, or the blanket with the black (streak) belt in center. While the body of the blanket was laced with strips of white and black, the center was mounted with a wide black belt, with additional red and blue stripes woven in between. Similar belts were woven in equidistant intervals between the center belt and the ends, though they were narrower than the center belt. The corners were decorated with black tassels, making a very attractive blanket.

nakhai bicîfdi, the Mexican rug or pelt, was a pattern borrowed from the Mexicans. The center was woven in a belt of blue flanked by narrow strips of black, the remainder of the blanket alternating in belts of white, black and blue, interspersed at optional intervals. The design was a very plain one and made for the Mexican trade.

The *hânolchâde*, or carded blanket, which is now designated as the chief's blanket, is probably the chief of blankets, though it can hardly be said to have been worn by the chiefs exclusively. Here, too, the original idea of alternating stripes of black and white is retained in the body of the blanket, though as a distinctive feature three zigzag diamonds made of small cubes of blue, red and black yarn are set in the center of a wide belt of black. The interior of each diamond is a perfect white surmounted by a red cross in the center. The top and bottom of the blanket is finished in similar half diamonds. The patterns of modern blankets are largely variations or modifications of this one.

baghaftlôni, slit-weave. No special design seems to have been assigned to this blanket, but any blanket might be woven so as to leave a slit about four fingers wide in the center of the blanket, which was afterwards laced with blue yarn. It is generally stated that this weave had to be occasionally resorted to in order to avoid overdoing weaving. Yet it has also been advanced that this blanket was worn by the men just as the women used the bill, or woman's dress, and that to avoid ridicule, the above version of overdoing the weaving has been attached



to the "slit-weave." But this seems rather far-fetched.

The above are said to be the old style blankets. Other blankets especially designated are:

beëdlé, or beëdládi, the warp, any kind of blanket.

diyúgi, or beëdlé diyúgi, soft, fluffy blanket; beëdlé ditsósi, downy or shaggy blanket; akfda't'nfi (akfdahi'nfi), "which are laid on something," the saddle blanket.

beëdlé aíné'éstlóni, doubly-woven blanket.

beëdlé t'fól beéstlóni, Germantown blanket.

beëdlé nakálchf qahatsósi beéstlóni, a bayeta blanket.

beëdlé yishb'zhgo yistlóni, diagonal weave.

beëdlé i'fmásgo yistlóni, blanket woven in squares.

beëdlé dotf'zhi, blue blanket, whose prevailing color is blue with occasional red and black stripes interspersed.

The loom was also used for weaving shirts for the men:

æ dotf'zhf, blue shirt, from its prevailing color.

æ ndádeschf', red striped shirt, from the red stripes which ran through the body and sleeves of the shirt. The sleeves were



Blue Shirt.



Shirt with red stripes.

woven separately, laced together and sewed to the shirt, which in turn was laced down the sides. These shirts are no longer woven.

Other articles woven on the loom were:

sís, or esdzán bizfs, woman's sash. Originally this was woven

of black yarn with a blue band in the center. Since the introduction of bayeta they are now exclusively woven of red yarn and are, therefor, designated as *sis lichfigi*, red girdle. These



are belts about four inches wide and six or more feet long, woven in red, with small white designs, and long fringes at each end. The sash is still in use.

jánézhi (*jād nézhi*), or *yistlě* (*yistlě*) *tłól*, garter strings, used in fastening the leggings, are bands about two inches wide and two feet long. They were of red, black and blue colors, though red is now preferred.

The *tsitłól*, hair-cord, used in tying the hair, is of the same pattern as the garter strings. At present several strands of common twine are used instead.

áčhöshtłól (*áčhöshtłól*), or *h bichöshtłól*, girth or cinch, is about five or six inches wide and two and one-half feet long, and is provided with stout fringe at both ends to secure the iron rings. They are usually made in red with a row of diamond shaped figures in white and other colors.

aghásis tłól, wool girdle rope, because it is woven like the sash.

dabála (Sp. *taparo*), is the shawl of Mexican introduction, and is not woven by the Navaho.

While the ordinary loom was used for all of the above-mentioned fabrics, smaller devices for the manufacture of garters, hair-cords, sashes, cinches and cradle cords, have gradually come into use. The loom for the sash and cradle-band is the ordinary loom in miniature. Similarly, the prongs of a forked pole now answer the purpose of uprights in the garter and hair-cord

looms, while the warp for the cinch is fastened immediately to the cinch rings, which in turn are lashed to a tree or post in a manner most convenient for operation. The warp, heald, shuttle, in fact all the various parts of the smaller looms, are designated by the same names as those used with the larger loom. The smaller looms, however, have special names.

tsítłól yístłó', hair-cord loom; jánézhi, or yístłétłól yístłó', garter loom; esdzán bizís yístłó', sash or belt loom.

hí bichóshtłól, or achóshtłól yístłó', cinch loom.

DESIGNS.—When weaving a blanket the Navaho woman does not have before her a plan or design, carefully worked out in detail upon paper or buckskin, nor even roughly sketched upon the sand. She may have the figures, even the whole design in her mind before beginning to weave, but, as a rule, the design develops with the work. Most of the figures seen in a Navaho blanket are stationary, that is they reoccur in similar or different combinations, or with slight changes, in other blankets, and have set names by which they are known. There are no circles, arches or round corners in a Navaho blanket, but all corners are sharp-pointed at angles of various degrees, and all lines are straight, oblique, zigzag, serrated, etc.







There is no system as to the use of the different figures, that is, they are not arranged into any kind of hieroglyphic order by which a woman could weave her life's history, or any other history or story, into the blanket, as has been asserted by some writers. The Navaho blanket, therefor, is a *human document* only in so far as it shows the untiring patience and diligence, the exquisite taste and deftness of a semi-barbaric people, and the high art and quality of their work, wrought with such simple tools and materials.

As for designs in modern blankets, which by some are interpreted as replete with religious symbolism, such interpretations merely attach an undue idealism and importance to the design which it does not contain. A glance at the names for some of

the designs will bear out this point and show that these names designate figures found on paper, cloth, or anything else. Then, too, it will be remembered that Navaho women are devout and faithful clients of their religion, possibly more so than the men, and would scarcely trifle with religious symbols, many of which may be viewed in effigy in the course of certain rites, and at certain seasons of the year only. This conservatism is presumably responsible for the taboo (*bahádzíd*) placed upon the following and similar designs: *f'ni'*, thunder; *átsínlísh*, zigzag lightning; *tqéholtsödi*, the water ox; *tqéłł*, the water horse; *déłgyéd*, a horned monster; *tsénahalé'*, a monster eagle; *lótso*, a monster fish; *tsístqéł*, a tortoise; *chæ'daghái*, the turtle; *mâ'i*, the coyote; *léchái*, the dog; *cháił*, the frog; *nashú'i díchíshi*, the horned toad; *tłístso*, the bull or blow snake; *tłishká*, the track snake, and snakes in general, in a word, anything harmful.

On the other hand, designs of the *natśíłłd*, rainbow; *sótso*, big stars; *atsólághái*, sheet lightning; *kā*, the arrow; *náhotsödi*, evening twilight; *náhodætłish*, celestial blue; *chaháłqéł*, darkness; or of the sacred mountains, or anything of a beneficent character, may be designed with impunity.

The following are the names, with translations and descriptions, of some of the figures used in modern blanket designs. These are only some, to gather all the different figures, and to describe them, singly and in combination with others, would alone fill a volume.

- | | | |
|---|---|---|
|  | 1. <i>dákha náháiłn</i> , (card-like), a square. |  |
| 1 | 2. <i>beéditłł náháiłn</i> , (slingshot like), a diamond, also called <i>sô tso</i> , big star. | 4 |
|  | 3. <i>beéditłłhi</i> , (slingshot), an elongated diamond. |  |
| 2 | 4. <i>tsín alnáozíd</i> , (sticks crossing each other), Roman cross. | 5 |
|  | 5. <i>sô</i> , (star), St. Andrew's cross. |  |
| 3 | 6. <i>tqágo dez'á</i> , (three points), a triangle. | 6 |

7. só deshzhá, (pointy star), four lines crossed so as to form a figure with eight points, or a St. Andrew's cross drawn through a Roman cross. If made somewhat larger than ordinarily, it is also called só tso deshzhá, big pointy star.



7

8. tsiyél năhălĭn, (like a queue), two triangles touching each other with their apices.



8

9. tqágo dez'á be dĭgo des'á, (four points with three points), four triangles touching with apices, a Maltese cross.



9

10. năhokhôs, said of large, long objects in horizontal rotation, a swastica cross.



10

11. dăkha năhălĭngo năhokhôs bĭ' nĭsă'á, (a nahokhos within a card-like figure), a swastica surrounded by a square.



11

12. dăkha năhălĭnigi beălqi'ăz'á, (card-like figures within each other), square inside of another square.



12

13. beăditĭf năhălĭnigi beălqi'ăz'á, (slingshot-like figures within each other), diamond within diamond.



13

14. noltĭzh, a zigzag line.



15. be'ndastĭăgo noltĭzh, (cornered zigzag), irregular zigzag.



14—15

16. dana'ăzkhăgo noltĭzh, (a row of empty places in zigzag order), a line resembling the crown of a battlement.



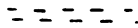
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17. yistĭn, (freckled), small dots.



17

18. dokhĭsh, (spotted), dots larger than the yistĭn.



18

19. dădestsô, spots somewhat longer than dokhĭsh.



19

20. beăditĭf babă dolăghăs, (slingshot with serrated edge), diamond with serrated edge.



20

21. *dólāghās*, a serrated line; *bésdō-lāghās*, (ancient knife of chipped flint).

22. *Rōs yishchfn*, (cloud image), a terraced figure on side of blanket.

23. *hokhá*, (a large empty place or receptacle), a large terrace-edged diamond usually in the center of a blanket.

24. *hokhá beālkhéāznīl*, two *hokhá* following each other.

25. *honākhā*, a *hokhá* with a half *hokhá* on either end.

26. *noltfīzh aīnfāznīl*, a figure with zigzag edge in the center.

27. *dólāghās beālkhéāznīl*, two figures with serrated edges following each other.

28. *ālkhé ndazhá*, (pointed ones following each other), a row of small figures with points, for instance, v-shaped figures not too near together.

29. *ānfkhē*, (tracks), a double row of *ālkhé ndazhá*.

30. *āqideīnāgo ndazhá*, (sticking in opposite direction), same as *ānfkhē* only that the figures of one row are reversed.

31. *ālkhdōfēzh*, (touching each other), a row of small figures, one touching the other, for instance, a row of small flat-based triangles, set on edge, so that the apex of the one touches the preceding one at the center of the base.



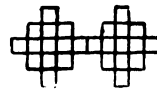
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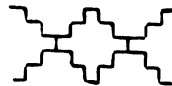
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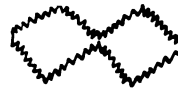
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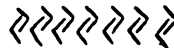
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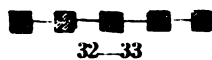


30



31

32. *alkhé itēzh*, (following and touching each other), a row of small figures connected by short lines.



32-33

33. *alkhéyitēzh dākha nāhāfngo*, a row of small squares connected by lines between them.



34

34. *delzhā*, battlement-like elevations, especially along the border.



35

35. If another color is woven next to *delzhā*, and the intervening spaces are left a distinct color, they are called *i'nil*, enclosed, encased.



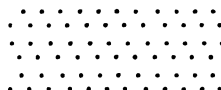
36

36. *alqihādofēzh*, (touching, following within each other), said of a succession of small figures, usually along the border, of such a form that the space between them is a reverted reproduction of same.



37

37. *sô aqādē'nīl*, (two stars together), two large diamonds in center of blanket.



38

38. *hoshdūdi*, the name of the whip-poor-will, strewn with spots.

39. *ānf āzf*, (standing in the middle), said of any central figure of extraordinary shape.



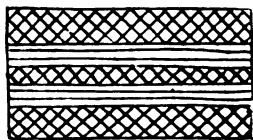
39

40. *aqīdinlāgo dana'āzkhā*, (spaces opposite), a succession of small figures whose intervening space shows the same figure inverted or opposite.



40

41. *aqēdzébā'*, means a gray stripe or border all around. This is used with other colors: *dzégai*, white; *jīchf*, red; *dzētsó*, yellow; *jfjīn*, black; *jfdætīzh*, blue.



41

naāshchā (*nashēchā*, *nādeshchā*), I make a design.

nashchā, designed, a design; *ndeichā*, they design.

benashchā, designed in (with); *naāshkhā*, design, figure.

diyúgi nashchíá, a fluffy blanket with a design.

ditóósi nashchíá, a shaggy blanket with a design.

likhízheo nashchíá, a spotted design.

yistíingo nashchíá, a speckled design.

beedítíí benashchíá, designed in diamonds. (see fig. 41.)

dákha nahalíngo benashchíá, designed in small squares.

nodóz, striped; dotíish bēnodóz, blue stripes; lichí dégo bēnodóz, red striped upward; labá' yágo bēnodóz, gray stripes downward; litso naaígo, or nágo bēnodóz, yellow horizontal stripes, altéíji mótíish, zigzag figure on either side.

dotíish beqótóó', blue is woven out, a blue border.

lízha, etc., bíkdestóó', other colors woven with black (on a black background).

KNITTING.

Knitting is practiced by the Navaho to quite an extent. Like weaving, this, too, was originally borrowed from the Pueblo Indians. At present only steel needles are used in knitting, which are either purchased at the trading post, or made of wire or the ribs of an umbrella (becháhá'óhi). These are broken to the proper length and slightly rubbed upon a stone to obtain a smooth blunt point. The paint or enamel is worn off in the course of time by constant use of the needles.

Before steel and iron was available, knitting needles were made of wood, for which the slender twigs of tsítíiz, *Findlera rupicola*, or of duwúzhizhin, black greasewood, were used. Both are very hard and susceptible of a smooth, slick polish.

For knitting, blue, white and black yarns are used, and the present output of the knitting industry is limited to leggings and gloves. The latter (kíish) are made with a separate thumb, although in late years some have also been knitted with all five fingers separate.

Leggings (yistíé) consist of long footless stockings, encasing the leg from kneecap to instep. At the top end a raised rim,

about one-half to one inch wide, is knitted by using *left* stitches. that is, the yarn is passed from left to right instead of the usual way. This rim affords a hand grip, and also adds to the wear and tear in pulling on the legging. To distinguish the right from the left legging, and the inside from the outside, a line or ridge is knitted down along the outside of the legging in relief, like a raised seam, by using *left* stitches at this point. At the lower end of the leggings a knitted or plaited wool cord is fastened, which passes under the foot below the instep, to keep the legging from working upward. The foot and lower legging is covered by the moccasin.

The stitch in knitting is closer and more tightly drawn than our own. Special care is paid to this feature to insure strength for long and hard usage.

Since leggings were always considered a part of the male attire (women have begun to wear them only in recent years) knitting was and still is mostly done by the men. The yarn leggings were not made or worn for riding purposes, for which they made leggings of leather or buckskin, and both were worn at the same time.

ashtló (asætłó, adeshtłól), I knit, weave.

yistlé yishtló (sætłó, deshtłól), I knit leggings.

lájish yishtló, I knit mittens.

yistlé, (covering), legging; khétqil, (footgear), stockings.

lájish, (handbag), mittens, gloves.

yistlé dotłish, blue leggings; yistlézhin, black leggings.

yistlélgai, white stockings (leggings).

bidá na'astłó, (reknitted lip or rim), finished rim.

khftqin, or qáatqin, (road on or out of), ridge along the side of legging.

bakhádi, (on top), outer side of; biyf'i, (inside), inner side of.

didzldgo ashtló (yishtló), I knit strongly, closely; nldzilgo ashtló (yishtló), I knit tightly; naneszldgo (yishtló), I knit loosely; nizhúnigo ashtló (yishtló), I knit nicely.

yistlé beētłóhi, (with which one knits), knitting needles.
 bidā nahineshzhâhigi, fringed rim at top of leggings.
 bádildzíd, (it dropped), I dropped a stitch.

SHEEP RAISING.

The Navaho country is especially adapted to sheep raising, and the Navaho equally well fitted for pastoral life, a coincidence which practically has placed him on a self-supporting basis. Sheep, horses and cattle are unquestionably of Spanish introduction, so that references to them in legend, song and prayer are of comparatively recent date, and are held as such by many Navaho. It is also pretty well established that previous to the advent of the American, and even sometime thereafter, the Navaho was not given to pastoral life, but to less peaceful pursuits, such as raiding and marauding, and as a matter of fact, droves of horses were kept for this very purpose. Subsequent to the return from Fort Sumner, sheep and cattle were issued to them by the Government, and increased by honest, and often by dishonest means, though the stringency of the law has at present put an end to the purloining of cattle.

While their method of herding sheep leaves much to be desired, a steady improvement is nevertheless to be noted, as for instance, in the judicious selection of rams of good quality, in the careful culling of old stock, in the separation of goats and sheep by some sheep owners, in dipping, and the like points. The herds are ordinarily under the supervision of children and women, who keep them on the move from early morning until sunset, when they are returned to the corral for the night. By constant travel over the same course much of the grazing is wasted and accounts, to a great extent, for the scarcity of vegetation in these localities. No provision is made for the winter as the herds feed on the withered grass and sagebrush, or when the snow is very deep, piñon and cedar branches are cut off for the sheep to graze on. Shearing is done in the spring and fall with

foreign shears, and some care is taken to postpone the spring shearing until the warmer months to avoid the storms of spring. During the lambing season the sheep and their young are taken to mountainous districts, or to such as offer good facilities for grazing and water, until the lambs are quite strong enough for travel.

Less attention is given to the cattle and horse herds, which are driven to the mountains where sheep are excluded. Occasionally the owner makes an inspection of them, or with some assistants visits and rounds them up for the purpose of branding them. While sheep are usually the property of the wife, cattle frequently belong to the men. Often, too, fathers and mothers divide a portion of their property between their small children, branding or earmarking the stock and their produce to better distinguish them. Branding is done after American fashion, with branding irons obtained at the agencies, or otherwise purchased from blacksmiths.

debé, a sheep; debé bichó ádini, a wether.

debé yiltsán, sheep going with young.

debé tsá'i, sheep having young ones.

debé dōlkōli, merino sheep.

tł̄si, a goat; tł̄si dē fli, angora goat.

debé nshťá (debé neťá, debé dīnesht̄l), I grow sheep; belasána, apple, hī, horse; dzidzétso nshťá, I raise peaches.

debé (bégāshi, hī), nsé' (nesá, dīnesél), I nurse a sheep (with goat's milk). Discarded lambs are often kept at the hogan.

debé neyá, or ninúsá, the lamb grows; debé nánshkhād (nanél-khād, nādīneshkhāl), I herd sheep (or cows and horses).

tqānīshkhād (tqānīkhād, tqādīneshkhāl), I water the herd.

náneshkhāl (nanúnīkhād, ndīneshkhāl). I return (home) with the herd.

ānt' bīnshkhād (bīnīkhād, bīdīneshkhāl), I drive the herd into an enclosure.

debé baghán, a sheep corral.

- debé baghán náneskhāl, the gate of the sheep corral.
 yahanánshkhād (yahanánkhād, yahanadinéshkhāl), I drive the herd into (a corral).
 áyá', a tick; yā dotłzhi, blue (sheep) lice.
 debé bét'ód (bet'ód, bídot'ól), scabby sheep.
 debé tqánasgis (tqanségis, tqándidesgis), I dip sheep.
 debé tqanágis, a sheep dip.
 debé daadló (dazdlí, dadodlól), sheep are chilled.
 hakáz baghá (bíghá, bídoghál), or hakáz nabiłtséd (nábıtséd, nabıdolsıl), the cold kills them, the sheep are frozen to death.
 debé bichıclısh, the sheep suffer from catarrh.
 debé bídokhós, they sneeze.
 tqádishgyésh (tqadıgısh, tqadıdesghısh), I shear sheep.
 besh aqédlı, or betqádigyéshi, sheep shears.
 tqádigyēshgo, shearing season (in general); tqádadigyēshgo, shearing season (when on in the whole neighborhood).
 ághá, wool; debé baghá, sheep wool; debé dolkóli baghá, merino wool; tlısi baghá, goat wool; tlısi dē lli baghá, angora goat wool; ajá'il, or ajá'ghā, wool of the leg.
 shı shı bēdılłıd, my brand; bēdılłıd, a branding iron.

AGRICULTURE.

In addition to sheep and cattle raising agriculture is one of the chief industries of the Navaho, and was apparently pursued by them from the earliest times. The accompanying labor, however, was shunned and usually assigned to captive slaves, so that the hastqín, or lord, might be enabled to devote his time in some noble raid or in complete inactivity. This condition, however, has undergone a complete change, the slave has disappeared to a great extent, and each family is now possessed of a small farm where corn, melons, squashes and beans are raised. Gradually, too, such products as oats, hay, wheat and alfalfa are being added to the list.

VARIOUS KINDS OF MAIZE.

nadā, corn, corn seed.

nadālgai, white corn; nadāltsoi, yellow corn; nadā dotlsh, blue corn; nadāshzhīn, black corn; nadā altqās'al, variegated corn; nodōzi, striped corn; nadālchf, red corn; nadālbaf, gray corn; nadā āstfīni, freckled corn; nadālkhīzh, speckled corn; nadātso, large seeded corn.

neshjāhi, sweet corn, which is also lagaf, white; dotlsh, blue; litsoi, yellow; lizhfni, black.

nadā bakhā'i, male corn (grooved); nadā dijōli, female corn (a filled ear of corn without regular rows); nadāstān (?), probably with husks.

neshjāhi tso, large sugar corn, which is also called nadā nās, long corn, when it is matured or hard.

nadā dilchōshigi, popcorn or hardened sweet corn.

dzilghā bidā, Apache maize.

destqāli, an ear with wide grooves, widely grooved corn.

dāāchān (dāchān), russet corn.

tsī nshtqēli, wide top ear of corn.

dōhunotfni, invisible cob, because it is covered with corn.

zāhātādi, the cavity of the mouth, corn with extraordinarily wide grooves.

PARTS OF THE PLANT.

nadā bikhētōl (behētōl), the root of corn.

dāākās (nadā bakāz), the stalk.

dāākās lakhānigi, (sweet stalk), sugar cane.

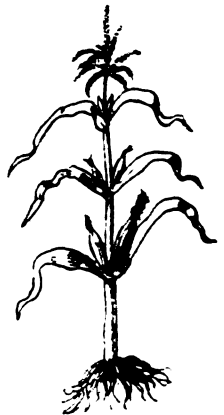
bitā (bitān), or bfhodijil, the leaves.

bfhodijil, the several leaves on each side of the stalk; bitā, the single leaf.

nadā bizōl, the corn tassel.

dayāān (ayāān), unripe ear.

dā'ātān (dātān), cornhusks and fodder.



bitsighá, its awn (beard); dáatsín, an ear of corn.

dáatsín (nadá bitsín, corncob), the pulp of the cob.

nadá bikhétqál, the ankle or butt of the cob.

nadá bowhókis (?), the grooves of the ear.

há' tē ntí', which thrives at night, corn (sacred name).

bitsighá dá'ichf, the awn is red; nadá yichf, the corn is red (ripening); nadá sitsábinigán, my corn (or plants) are drying up (from the wind or drouth).

něshjáhi, sugar corn, sweet corn (see supra).

nadá yishdé, I pick corn; ákáz yishdé, I pick corn with stalks.

áshdlád, I husk corn, or dáta yishdlád, I tear the husks off.

nadá álya, the harvest is done.

kidishlé, I plant (anything). Planting is usually done in the months of April and May.

BEANS.

ná'óli, beans; ná'óligaf, white beans; ná'óhíchf, red beans; ná'ólistíni, freckled beans; ná'óhíkhfzhi, speckled beans; ná'óli nodózi, striped beans; ná'óhítsóí, yellow beans; ná'óhíbal, gray beans; ná'ólishzhfni, black beans.

ná'óli behégudi, hoe-shaped beans, lima beans; ná'óli númázi, peas; bínestá', (it is ripe), the pod of beans.

PUMPKINS AND MELONS.

náyíze (nayízi), the pumpkin.

nayízilchí, the squash; adé', the gourd.

nayízi tséi, the tail or pear-shaped pumpkin; nayízi tséi (atsæ, the navel), navel-shaped pumpkin, black pumpkin with a double tip; nayízi ndestáhi, yellow, flat pumpkin.

tá nayízi, a mere pumpkin, the real pumpkin (to distinguish from others of American introduction).

há' jntí', which thrives during the day, the pumpkin or squash (sacred name).

nayízi bitqá'tsoi, (the pumpkin is yellow at intervals), it is in blossom.

tējiyāni (dāātēgo jiyā, eat them as they are, eat them green), watermelon; tējiyān ntīsi, hard, small watermelons.

dā'neskhāni (nāneskhāni, globular), mushmelons, native cantaloupes; dā'neskhāni dichīfzhi, rough melons, American sugar melon.

nāyize sakhād, a pumpkin plant; nāyize bitlōl, pumpkin vine; nāyize bitā, pumpkin leaves; nāyize behētōl its root; nāyize bokū, or bilāstsī, pumpkin seeds.

GRAIN AND HAY.

tlō', hay; tlō' wāi, alfalfa.

tlō' nadā, wheat; tlō' nadā bizōl, wheat tassel, the sheath of wheat.

tlō' nānōl'ōlizi, hanging down, or hī bitlō' nadā, oats.

WHEAT.

In districts adapted to wheat raising the grain is usually sown broadcast and reaped in harvest by cutting it with a knife or sickle. Eventually the stacks of wheat are unloaded into a small corral and scattered there. A number of horses are then driven into the corral, to trample and thresh the grain, after which the straw is removed and the grain swept in a heap. The chaff is separated from the grain by collecting a quantity of it into a basket and running the grain through the fingers some distance over it, and blowing the chaff aside, or allowing the wind to do so.

tlō' nadā qishgyēsh (qégīzh, qīdeshgīsh), I cut the wheat.

tlō' nadā bichīl, the stalk of wheat; bitsōs, the sheath.

tlō' nadā hadāditsō, wheat is ripening (turning yellow).

tlō' nadā digal, wheat is ripe.

tlō' nadā behigēshi, a sickle.

tlō' nadā hashkā', (hālkā, hadeshkāl), I thresh wheat.

hashchīd, (hāchīd, hādeshchīl), I rub the wheat (between my hands).

hī qā'ēl'es (qā'i'l'ēs, qā'ldo'l'is), the horses trample the wheat.

bizhól, the chaff.

bizhól báhisól (báhísól, bádesól), I fan or sift the grain (by blowing).

bizhól bâhoshchîf (bâhishêlchî, bâhideshchîf), I winnow.

bizhól bâashtêshlê (bâashtêshla, bâashtêdeshkî), I winnow the wheat.

nâsâs (nsêâs, ndesâs), or nîkhêshkhâd (nîkhêlkhâd, nîkhîdeshkhâd), I sew broadcast.

FARMS.

What may be designated as the ceremonial way of planting is not observed to-day by many. This requires that the corn be planted in the form of a helix, winding the several rows sunwise. In the center of a large field, and facing east, the first grains are planted, followed by others a step or two east, south, west and north of the central plant in the order mentioned. The second row is continued from the northern plant so as to encircle the five plants. The men and women planting are careful to advance ahead of one another, but never outside the circle once begun. Thus the winding continues increasing the periphery of each circle until the twelfth has been reached, where the final plant is on an exact radial line with the eastern plant of the initial five. This farm is known as the circle farm.

dâākê', a farm; dâākê' hôtqêl, a wide field or valley.

shâ'bikêgo, sunwise.

dâākê' nahasbâsi, the helical or circle farm.

Another ceremonial farm was divided into blocks of twelve, running north and south, which must be planted sunwise. To do this the two blocks at the southern end were planted facing westward, after which the entire upper half was planted facing northward. Turning to the east, and facing southward, the lower half was then planted, finishing the circle at the point of inception. This farm was known as:

dǎākĕ' hazlá', probably the flat or block farm, and was also called ndeltǎ dǎākĕ', the bordered farm. Other farms are called tqábá hodisós, the silvery or speckled shore, or farm, from the variety of vegetables planted there. A place bordering on other farms was selected for this purpose.

dǎākĕ' njokhéli, a small farm in addition to others.

al'átso, small spots of arable land selected at random.

These distinctions, however, are gradually disappearing and almost any spot, whether it be the bottom land of some arroyo or the loamy soil of a valley, is designated as dǎākĕ', farm, whenever it is used for agricultural purposes.

dǎākĕ' hózhöd, a clean field.

IRRIGATION.

Irrigation is practiced on a small scale at points where water is available, such as the Little Colorado and San Juan rivers, Tseili, Whiskey, Chinlee, and other creeks and arroyos. Since these stream beds run dry in midsummer, the fields are completely immersed in the early spring, small banks being thrown up around the fields to hold the water. Permanent dams and reservoirs are not very common.

bis nnæs anát'í, a dirt bank enclosure, such as surround a field for irrigating. This is also called hodíldás.

ndeltǎ, banks intersecting a field for swamping.

dahastqá, a small plot or garden, a field divided into small squares by low banks of earth.

dádínsht'ín, I throw up a bank or dam.

yisht'ín (sét'ín, desht'ín), I build a wall.

lēsh altsánēheshgyēd, I dam or bank, throw the dirt on both sides; býǎ' hǎn'ishgéd (býǎ' han'ígéd, býǎ' had'neshgól), I dig under it or below.

nǎn'ishqēsh, I irrigate or soak the ground.

tqóhashgyēd, I take out a ditch; tqóhagyēd, or tqóigyēd, a ditch; nǎnzhōzh, or tsé'nǎ' nǎnzhōzh, a bridge; býǎ'haní'á, a

brace, support; bŷāhanĭtsé (bŷāhanitsĭ, bŷāhadĭnestsĭ), I brace it.

tqō nĭfni, a stream, or flowing water.

bokhó, a cañon or arroyo; chāshkhě, an arroyo.

chĭnĭfnigi, the mouth of a cañon, or where the water flows out.

béekĭd, a pool or lake; tqō siyf, a body of water, is also used for lake.

LAND TENURE.

In many districts land is held in severalty by members of one or affiliated clans to the exclusion of all others. Each family selects a portion of the tract, indicating the boundary by a heap of stones, or a footpath, or a fence. Large settlements, and much less villages, are not formed, the general tendency being to live as far apart as possible. This plan is found more conducive to domestic peace and conjugal fidelity. Where small settlements are formed the ditches are common property and are maintained by the several tenants. The farm is, as a rule, property of the husband who disposes of it before death.

PLANTING AND PLANTING STICKS.

In sandy soil corn is planted by means of a planting stick, which is of two different shapes. The straight stick is a branch of greasewood (duwúzhĭshzhfn), slightly pointed. The other is a stick provided with a projecting limb just above the point and is used to press down with the foot. The small opening is made to preserve as much moisture as possible. The holes are dug by the men, followed by the women, who drop the kernels into and close the holes with their feet.

Where the soil is loamy the holes are now dug with a mattock. The value of plowing

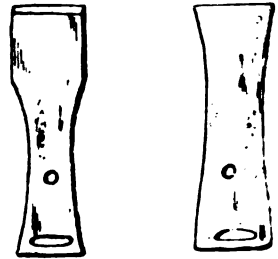


the ground is also being more and more appreciated.

gīsh, a planting stick.

HOES.

There were two different types of hoes in the earlier days. The straight hoe was made of wood hewn down to the thinness of a board, one end of which was beveled on both sides. A small hole was provided near the center of the board and a grip near the end. In operating the hoe was grasped in the palm of the right hand, passing the four fingers through the opening in the end, and the thumb of the left hand through the small hole near the center. In this manner it was scraped forward, the operator, in a sitting position, covering the radius within his reach. This hoe was called *altāji behégüdi*, either side hoe, because it might be used that way, or because the operator might clear the ground on any side from one position.



Another hoe of the same type, and used in the same manner, was made of the shoulderblade of an elk or deer and was known as *agāstsin behégüd*, shoulderblade hoe.

The other type of hoe was also made of wood and was used in a standing position after the manner of a scythe. It consisted of a curved blade to which a wooden handle was secured with a thong of elk (*dzē bakhāgi*). It was grasped in the left hand while the thumb and index finger of the right hand passed through a thong of elk secured to the rear of the blade. This hoe was known as *nābehégüdi*, or *nāgo benāhāgüdi*, the side hoe, or with which one hoes from the side.



At present hoes of American make are purchased at the stores and are called *behégüd*, hoe.

nāhāshgüd (*nahógyed*, *nāhodeshgoł*), I hoe.

GRANARIES.

The ordinary hogan is not adapted to storing supplies of grain beyond the daily requirements. Accordingly, the winter supply of corn, wheat, melons, squashes, piñon nuts, and the like, is stored in pits of the shape of a wicker bottle. These are dug near the summer residence, or in the field, and the small opening is then bridged over with sticks, bark and dirt to conceal any trace of it. Formerly the digging was done with the planting stick.

núkké', underground pit, or granary.

núkké' qahashgyéd (qahógyéd, qáhodeshgöl), I dig a pit.

nadá, etc., nòshchí (nòshéichí, nòdeshchí), I store corn, piñons, wheat, etc., underground.

áda'hunsíd (áda'hunúzíd, ádá'hodesí), I cover the pit (level it with ground).

MODERN IMPLEMENTS.

The hoe and planting stick were originally the only farm implements used, but are now being displaced by modern implements with increasing rapidity.

bénahúídládi, a plow.

nfhúishdlád (nfhuyédlád, nfhudiyéshdlád), I plough.

hótíísgo nfhúishdlád, I have hard ploughing, or holzhóligo nfhúishdlád, easy, and gúyá'go nfhúishdlád, deep, and da bakhági nfhúishdlád, I plow the top of ground (say three inches deep).

bíe benahatsédi (benátsédi), clod breaker, or besh nalzhódi, (dragging iron), a harrow.

bíí yánáshílbáí, a scraper.

bíí yáneheshbál (bííyánehéílbál, bííyánihidéshbál), I scrape the dirt.

lësh beqaháíkhádi (beháíkhádi, or lësh benáíkháíkhádi), a shovel.

lësh beqaháíkhádi átsósigi, a spade.

lësh beqahashkhád (beqaháíkhád, beqahídeskhád), I shovel dirt.

lēsh beqahash'á (beqahá'á, beqahidesh'á), I put the dirt there with a shovel, I shovel dirt.

lēsh beqahashkhá (beqahákhâ, beqahideshkhál'), I carry with a shovel, I shovel dirt.

altáádeinfni, a pick.

altáádeinfni beqáhashgyed (beqahágyēd, beqáhadeshgūl), or bena'áshgyed (benaságyēd, benádeshgūl), I dig or work with pick.

tľó' beyilzhéhe, hay mower; tľó' nestá, hay is ripe; tľó' ntsá', the hay is thick; tľó' sagán, or bisgá, the hay is dry.

tľó' beyigéshi nnézigí, or tľó' behīlagháli, a scythe.

tľó' qishqál (qélqál, qídeshqál), I cut the hay with a scythe.

tľó' yishé (yíshē, deshí), I cut the hay (with mower).

(tľó') benáhüidzídí, a rake (hand or horse rake).

náhüisíd (nahuyézíd, nahodiyésíl), I rake.

tľó' aqánehesíd (aqánehézíd, aqánihidésíl), I rake the hay together.

bilatqái, three-tine hay-fork; biladí, four-tine.

tľó' benáljólí (benáháljólí), a hay-fork.

tľó' aqáneheshjól (aqanehéljöl, aqánihidéshjöl), I cock hay, turn it up; aqááshlé (aqá'áshla aqáádeskhíl), I haul away.

tľó' bíl aqánfísbás (aqán níyélbás, bíl aqándiyésbás), I haul the hay away, or tľó' næheshqé (nehéyí, nihideshqél), or tľó' aqán neheshqé (aqáneheshqé, aqánehéyí, aqánihideshqél), I haul hay away; tľó' íhishjól (iqéljöl, íhidéshjöl), I haul hay.

tľó' bílnfísbás (níyélbás, nídiyésbás), I haul away, or home.

tľó' yá'aqishqé (yá'aqéyí, ya'aqideshqél), I haul and store the hay inside (of house or barn).

bekfídlíyéhe, or altáádeinfni ntqéligí, a mattock.

MODERN TOOLS.

In addition to the implements mentioned in the preceding, modern tools are used for repair work in general. A list of these tools is herewith given, as also a partial list of new words for modern contrivances.

bësh dotfîsh, iron.
 besh ntîfzi, steel.
 besh ditôdi, cast-iron.
 bésdolâghâs, serrated iron,
 as the edge of a saw, file, or
 cog-wheel.
 besh altsôsîgi, wire, bailing
 wire.
 besh âdeshzhái, barbed wire.
 besh âqêdîli, scissors.
 besh be'igfîsi, a metal wash-
 tub.
 besh bikêégfîsi, or bakhâi-
 gîsi, a washboard.
 besh beêkêldôî, a flatiron.
 bitqâdigîsi, a washbasin.
 besh nâlkhâdi, a sewing
 machine.
 tsâ tsôsi, a needle.
 tsâ tsôsi benâlkhâd, sewed
 with a needle.
 besh ânfnîgi, a call bell.
 besh binâghoi, or binâghoi,
 a clasp-knife.
 besh be'îlkhâli, cold chisel.
 beêtsîdi, a hammer.
 bæêchîfshi, a file.
 î'âdâlkhâli, a nail.
 î'âdâlkhâli altsîsîgi, a tack.
 besh bebaghâda'nîli, an iron
 bit.
 besh bebaghâdadzîlnêhe, a
 center-punch.
 nîl, a stone ax.
 tsênîl, a modern ax.

tsênîl yâzhe, a hatchet.
 tsê' nâlâghûli, or tsê' be-
 ikâshi, a grindstone, whet-
 stone.
 tsînbâs yâzhe, or tsînbâs
 bijâd dalâigî, a one-wheeled
 wagon, a wheelbarrow.
 tsîntqôshjê, a barrel.
 tsînbêshjîf, a board.
 tsîn qâhashjîgî, sawdust.
 tsîn beêchîfshi, a rasp.
 tsîn beêdîlkhôî, a plane.
 tsîn bebaghâda'nîli, a brace
 and bit.
 tsîn beqâhalzhîfshi, a chisel.
 tsîn bakhâhashkhâligî, chips.
 tsîn bakhâ qashkhâli (sêkhâl,
 deshkhâli), I make chips.
 tsîn biqâ'otsêl, a log trough.
 tsîn benî'ichîfshi, a saw.
 nî'îzhîfshi, a sawyer.
 nî'îshîf (nî'yîézhî, nî'diyeshî),
 I saw.
 altsâdashî (altsâdashêzhî,
 altsâdadeshî), I saw boards in
 two.
 altsâshî (altsâzhî, altsâde-
 shî), I saw a board in two.
 kînsîf (kînzîhî, kîdeshî), I
 saw it off.
 altsâdînsîshî (altsâdînzîhî,
 altsâdîneshî), I rip it in two.
 altsâshî dînsîshî (altsâshî dînzî-
 zhî, altsâshî dîneshî), I rip
 three or four strips.

do-deinfda, it is not sharp.

deinlān, it is sharp.

do-bidēlnīda, it does not cut it.

do-shidēlnīda (nt'a). it does not cut (for me).

do-sha'ijlāda (do-sha'ijlāda, do-shāādōjlāda), I can not penetrate it, for instance, with a knife or nail.

tfō' ishbīzh, burlap, gunny-sack.

æ bāhoghān, clothing store.

azē bāhoghān, a drug store.

dāgha ilzhē bāhoghān, a barber shop.

tsōdizīn bāhoghān, a chapel or church.

bēso bāhoghān, a bank.

chā bāhoghān, a latrine.

nalyēhe bāhoghān, a store.

lējīn qagyéd, a coal mine.

tqó qahādī, a pump.

besh tqó be nlnīgi, a pipe line, water pipe.

besh ntī', a rail track.

khúnālbāsi, a train.

besh hālnīgi (talking wire), the telegraph.

besh biyatqīgi (into which you speak), the telephone.

besh njīfīgi, or tsīnābās ndzīfīgi, (the iron or wagon

which moves rapidly), the automobile.

tsī'fzi, the bicycle.

jōhonā'af, a clock or watch.

tsīn dīlzhōi, a sled.

tsīnlāghāl, a drum.

tsīnlāghāl benānlāghāli, a drumstick.

beēkēlchfhi, pencil or pen.

bīkēshchf, a drawing or print.

bēsh be bīkēlchfhi, printing press, type.

nātsōs, paper, a note or book.

tsīnshdlōsh, a chair.

tsīnshdlōsh yiwōdīgi, or tsīnshdlōsh nadīnwōdīgi, or ātfa ātsfīgi, a rocker.

tsīndīlnī, an organ, violin, or other musical instrument of wood.

bēēzhō, a native broom.

benahālzhōi, a broom.

nahāshō (nahoshēshō', nahodeshō), I sweep.

chōhunshō (chōhunshō', chōhodeshō), I sweep out.

ākākhō', a lamp.

ākākhō' tqōīgi, kerosene, gasoline oil.

ākākhō' be'itfīgi, a wick.

SILVERSMITHING.

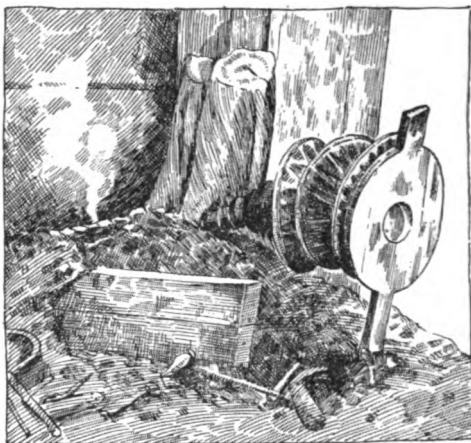
When and how the Navaho acquired the art of working metals is unknown, but there are reasons for supposing that it was introduced among them, or at least more developed and improved upon by them, since the time they have occupied their present country.

According to the sayings of some of the old silversmiths of the tribe, the art of working silver was introduced among them by the Mexicans about sixty years ago, or about the middle of the nineteenth century, when a Navaho blacksmith, known by his own people as *atsidi sani*, or the old smith, and by the Mexicans as *Herrero*, or the smith, first learned the art from a Mexican silversmith named *Cassilio*, who is said to have still been living in 1872—1873. An old silversmith, *beshtagai ifini altsosigi*, or the slender silversmith, who is still living (1909), and who at one time was considered one of the best, if not the best silversmith in the tribe, is said to have originally learned his craft from Mexicans.

The Navaho silversmith, therefor, is a comparatively modern product. Lieut. James H Simpson, who accompanied an expedition into the heart of the Navaho country in 1849, and who gives in his report good descriptions of the country and people as they then were, mentions their peach orchards, farms, herds of ponies, flocks of sheep, their beautiful waterproof blankets, etc., but has nothing to say about their artistic silverwork. The art then, as it exists to-day, probably developed since then, or within the last sixty years. In the following paragraphs a description is given, first of the tools and implements used by the Navaho silversmith as Dr Washington Matthews found them in the early seventies, and as they are to-day, and secondly of some of their work.

The tools and implements used by the Navaho silversmith are few and simple.

THE FORGE is a square structure of stones and adobe mud, built up to a convenient height, with the rear slightly elevated. The center is provided with a round, bowl-shaped depression for the fireplace. Two wooden tubes, uniting into one, and terminating at the fireplace, are walled into the rear elevation. These



A Navaho Smithy.

tubes are made by carving a groove into two pieces of cottonwood, hackberry or box elder, and then fitting the pieces together with the grooves facing each other. They are usually lined inside and outside with adobe to keep them from burning or charring. Sometimes tubes of clay are molded instead of these wooden ones.

atsfdkě, (pounding place), smithy.

dahāznīl, or atsfdkě dahāznīl, the forge and bellows.

beēlzōli bizōl, the air tubes leading to the fireplace.

khōnfkě, a fireplace.

tīs, cottonwood; jīlqāzhi, hackberry; sōl, box elder.

BELLOWS are made of sheepskin. The sack is about eighteen inches in diameter, and held distended by three or more hoops

of willow twigs. One end of the bellows is firmly secured to a nozzle and fitted snugly into one of the tubes leading into the fireplace. The other end is closed up by tacking it to a round disk of wood which is provided with a leather valve in the center and two arms, the longer of which projects downward. In the original forges two of these bellows were employed, which secured an even and continuous draught and prevented the fire from being drawn into the bellows. In working the bellows, the lower or longer handle is firmly rested upon the ground, and the upper one is moved to and fro in a horizontal motion. The two bellows are compressed and distended alternately, which causes a motion similar to that with which a boy works his Irish Mail.

beélzóli, (with which one blows), bellows.

bás, (round like a wheel or hoop), hoop.

da'na'áfági, (that which waves or flaps), valve.

debé bakhági badidőzgő, sheep hide in sack shape.

asól (ísól, adesól), I blow, work the bellows.

beélzóli ashlé, I make a bellows.

AN ANVIL may be either a hard stone, a piece of iron from a plow or wagon, a pick head, an ax blade, a wedge or a bolt—the latter generally driven into a log or block of wood. Soft iron, like the head of a bolt, is first tempered by heating it and cooling it off in water; then the bolt is driven through an iron ring or washer into a block of wood, the ring or washer keeping the head of the bolt from working itself into the wood.

bikéetsdi, (upon which one pounds), an anvil.

CRUCIBLES for smelting the silver are made of clay and baked hard in the fire. They are about the size of ordinary tumblers, with rounded bottoms and an outward curved rim which is provided with one or more spouts. Their crucibles are not very durable, but soon become porous and brittle and fall to pieces.

Very few, if any, are made at present, as good, strong and lasting crucibles may be obtained at the stores.

THE MOLDS in which the Navaho silversmith casts his ingots or molten silver are cut or chiseled into soft sandstone, iron or wood, or they are formed of clay. They resemble as nearly as possible the article which is to be wrought out of the molten silver, and are greased with mutton tallow before the silver is poured in. The molds for silver beads are usually cut into iron or hard wood.

bfädilyfhi, (in which it is melted), a crucible.

bfyayidsfdi, (into which the molten silver is poured), the mold.

yō nūmāzi beēl'fni, (with which round beads are made), or
yō nūmāzi bī'ēl'fni, (in which round beads are made), the
bead mold.

FOR SMELTING FUEL they use charcoal, which they prepare in this manner: They build a large fire of juniper logs and branches, and after the flames have died out and nothing but a heap of glowing embers remain, they cover these up with earth to smother them, and let them cool off.

gād, juniper, cedar; tēsh, charcoal.

tēsh dishk'ld (dīh'ld, dideshk'ld), I burn charcoal.

nistsēs (nīltsīz, dinéstsīs), I smother, put out, extinguish.

THE BLOWPIPE is now purchased, but was formerly made by hammering out a piece of brass or copper wire, which they then bent into a tube with a curved, tapering end. This tube is used in soldering, in connection with a lamp or a wick of twisted cotton soaked in mutton tallow.

beēlzōli beāqfildjéhe, a blowpipe for soldering.

FOR SOLDERING they use borax, which they purchase at the stores, saliva, and silver dust. Before the introduction of borax it seems they formerly mined a certain substance in their own

country, probably a kind of native alum, for this purpose. For whitening the tarnished or oxidized silver they use tsě dokózh, rock salt, which can be easily obtained in its natural state, especially in the Zuñi country. The tsě dokózh is dissolved in boiling water and the articles to be whitened are thrown in. For polishing and smoothening they use sandpaper or emery paper purchased at the stores, which has taken the place of the sandstone, sand and ashes of former days, and buckskin. For chasing and engraving they use knives, awls, shears, files, or any sharp-pointed iron tool.

Beside the already mentioned tools they use shears, hammers, vices, nippers, pliers, tongs, punches, steel stamps, etc., all of which are of comparatively modern introduction, and can easily be obtained at the trading posts.

beąqđiljéhe, (with which one pastes, glues or solders together), borax.

bikě'nfi, (which is sprinkled on), borax, or any powder used in soldering.

tsě dokózh, (saline rock), rock salt.

bina'ilgáhi, (in which one whitens), bowl, dish or receptacle used in soldering.

sai, sand; těsh, ashes; abáni, buckskin.

nátsós beěchfshi, (paper with which one rubs off), sandpaper.

nátsós beěshchfsh (bě'fchfzh, bě'adeshchfsh), I sandpaper.

yishgá (y'fgai, yideshgá), I whiten; ná'ishgá, I whiten again.

adishkhó (adfkhó, áđideshkhól), I smoothen, polish.

néidishkó, I smoothen, polish again.

besb, knife; tsá, awl; besh áqédli, scissors; besh áqédli tso, shears; beěchfshi, file; beěchfshi bđdazneskánigi, three-cornered file; beěchfshi nŷfsigi, round or rat-tail file; beěchfshi ntqéligi, flat file; beěchfshi ntsásigi, large file; ashchfsh (áshchfzh, adeshchfsh), I file; yishchfsh (y'fchfzh, deshchfsh), I file it; nadishchfsh (nadfchfzh, nádideshchfsh), I file off; biyfdéishchfsh, I file inside, inner surface; beětsđi, hammer; beotsági, pliers; beotsági tso, vice; beotsági beyávikháhi, tongs for taking crucibles out of fire.

beotsági khó' benajáhi, tongs to take fire with.

atqáshjá be'il'íni, (with which eyelets are made), small button pliers; beághádá'a'níi, punch; bíkíji ághádá'a'níi, or bíkíji ághádá'ályéhe, a piece of iron with a hole in it, which is used as a set punch; beághádá'ályéhe, auger; bíjiquáilkháli, bowl or vessel used to put in filings and other waste material; tsé dokózh bina'níi, bowl or vessel for the tsé dokózh; tsé dokózh bizís, sack or receptacle for the tsé dokózh.

begélchíi (beékélchíi), stamp; beághádadiltqázi, drill.

The Navaho have no silver mines in their country but purchase Mexican silver dollars, which are worth from forty-five to sixty cents of United States money. These Mexican silver dollars, or smaller coin, are either molten and molded, or cut and hammered into the desired ornaments and trinkets. Frequently, too, United States silver coins, dimes, quarters and half-dollars are used.

Before silver was plentiful copper and brass were used instead, and were purchased at the trading posts in the form of wire or small sheets, or taken from kettles and pans issued by the Government, or bought from the whites.

béshlágai, silver.

besh lichí, copper.

bésh litsói, brass.

náákhái bebéso, Mexican silver coin.

belagána bebéso, American silver coin.

béshlágai qágyéd, a silver mine.

béshlágai qashgyéd, I mine silver.

béshlágai nishgá, I heat it.

béshlágai ntqél áshlé, I flatten silver.

béshlágai áqidishjé, I solder.

béshlágai dishqí, I melt it.

béshlágai yistsíd, I hammer silver.

béshlágai ginshné' (Kínshné'), I cut silver.

béshlágai nahashní, I buy it.

béshlágai beádilyíi bíyas-síd, I pour silver into mold.

béshlágai názbás áshlé, I cut silver into circles.

béshlágai názha áshlé, I give it crescent shape.

yilkíd, ridged.

béshlāgai dzíldsis áshlé, I
give it a semi-tubular shape.

bíhalté, bowl-shaped.

alkésgis, twisted.

béshlāgai yijf, oxidized or
blackened silver.

béshlāgai na'ilgá, whitened
silver.

béshlāgai ndilkhó, polished
silver.

béshlāgai dolyf, molten sil-
ver.

béshlāgai nabadótséd, ham-
mered silver.

ba'na'clífh, dust, filings.

After having supplied himself with a sufficient quantity of silver, and made up his mind as to the size, shape and design of his projected work, the silversmith bends his whole energy upon his task. Frequently he receives orders for special articles, trinkets or ornaments from the traders, who submit to him the shapes and designs required, otherwise he works out and follows his own plans and designs, or copies them from other work.

béshlāgai dsítsfd, silversmithing.

béshlāgai yítsfdi, or béshlāgai il'fni, silversmith.

béshlāgai yístfd, I pound silver, I am a silversmith.

béshlāgai ash'f, I make silver, I am a silversmith.

atsfdi, a smith; astsfd, or yístfd, I pound, hammer.

ntífh áshlé, I harden, temper.

One of the most curious and interesting, and at first sight, most puzzling pieces of work wrought by the Navaho silversmith, are the necklaces of silver beads. These beads are round and inwardly hollow. They are of different sizes, and so arranged that the top beads, or those resting on the neck or collar-bone, are quite small; they gradually increase in size until those resting on the middle of the breast are almost one-half inch in diameter. When seen and examined for the first time one wonders how these savages manage to manufacture these neat silver, hollow globelets.

In the making of these silver beads different methods are employed by different smiths. One of these methods is the

following: The smith takes a Mexican silver dollar, or any other silver coin, and beats or hammers it out until it has the required thickness, or rather the desired thinness. This sheet of silver is placed upon an iron die, into which holes of various sizes have been made. These holes go all the way through the die and are slightly funnel-shaped. An iron punch, usually consisting of a bolt with one end rounded off hemispherically, is set square over one of the holes and struck with a hammer. The strokes with the hammer force the silver into the hole, the rounded end of the punch give it a hemispherical shape, and



since the punch is not thin enough to be driven into the hole, it cuts off the hemisphere with a fairly even edge on the rim of the hole.

When taken from the die or matrix the edges of the hemispheres are smoothed and leveled down with a file, and then per-

forated by driving the point of a file or other iron tool through them. Two are then strung upon a wire, the concave sides are fitted together so as to form a globe, which is wrapped with some very thin wire, and the seam is then soldered with borax, saliva, and silver dust.

When arranged upon a string or thong, each necklace contains from fifty to sixty—the finer, smaller specimens often number as many as one hundred beads. Usually they have a large crescent-shaped pendant in the front center, and in the lower half of the strand small silver crosses, and other flower-like ornaments are strung after every second or third bead. Necklaces of this kind are very much prized by the Navaho, and are certainly very ornamental.

yō nūmāzi, (round bead), silver bead.

beyijihāidadsīlnéhe, (in which it was struck, cut out), matrix.

behāidadsīlnéhe, (with which it is struck, cut out), bead punch.

bedajishné, I strike or cut out.

yō nūmāzi āshlé, I make silver beads.

yosdīsi, oval-shaped silver beads.

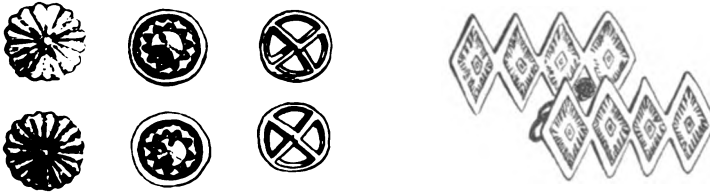
nāzhāhi, crescent-shaped pendant; chīl bitān, flower-like bead.

tsīn ālnāōzīd, cross-shaped bead; nāhokhōs, swastika pendant.

besh tsōsi bikīdesdīs, I wind thin wire around.

yō yish'ēsh, I string beads.

The simplest kind of silver ornament made by the Navaho silversmith is buttons. Of these the most common form is the



silver hemisphere described in the preceding paragraph, with an eyelet of copper wire soldered underneath into the cavity. Fre-

quently an eyelet is soldered on to a dime, quarter or half-dollar, and the coin used as a button; sometimes the coin is rounded into a hemisphere with the imprint of the die left perfect. From plain to ornamental buttons is but a short step. The simplest design is a star, which is obtained by filing a number of concentric rays upon a button. Outside of this, buttons of every size, shape and design are made, some of really tasteful and artistic workmanship. The Navaho makes a much more extensive use of buttons than his white, civilized brother. They do not suggest button-holes to the Navaho, but are almost exclusively used for the purpose of decorating. Moccasins, leggings, belt, pouch and pouch strap, pistol holster, gun scabbard, saddle skirts, bridle, coat, vest and hat are ornamented and set off with them.

yō nłchñi, button; ʔalaf dotłłsh yō nłchñi, a dime (quarter, half-dollar) button; yō nłchñ dahatsós, a cone-shaped button.

yō nłchñ ná'desghās, button with concentric rays.

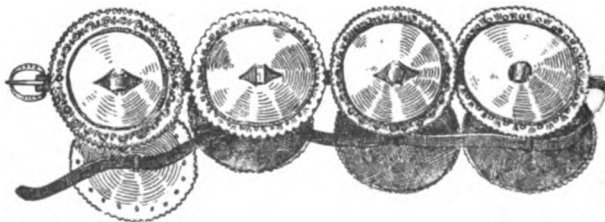
yō nłchñ deshzháhi, several buttons of slender, pointed, oval shape, joined together. Used for moccasins.

qáhídenēz, oval; qáhāshchī, pointed; násbās, round.

dākha náhālín, card-shaped, square.

nasdenēz, form of a parallelogram, elongated square.

A favorite silver ornament, worn with much pride and show, are leather belts, upon which are strung from ten to twelve

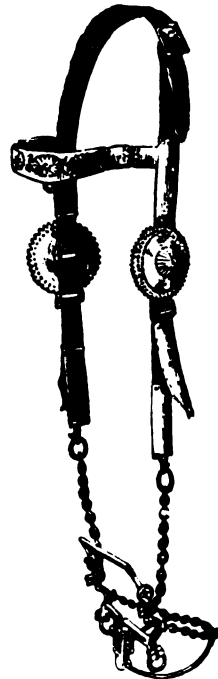


plates or disks of silver. These disks are usually of oval shape, have a scalloped edge, are slightly arched in the center, measure about four and one-half inches in length and three inches in

breadth, and are often beautifully chased and engraved. The belt is closed in front with a large, highly ornamental buckle. Each disk averages about three dollars in weight, so that a belt of this kind often contains silver to the value of forty dollars or more. On the lower side of each disk one or two cleats of copper wire is soldered for passing through the strap.

sīs, belt; beēlchfidlō, buckle.

Silver headstalls were formerly manufactured quite extensively and are not particularly handsome, but costly and showy. They consist of broad bands of silver, large and numerous enough to almost entirely conceal the leather, with more or less heavy pendants dangling on the cheek straps, and



Silver Bridle.



Conchas.

large conchas or bridle buttons at each side of the brow band. These bridles cost from twenty-five to thirty dollars, or their equivalent in sheep, ponies, or other stock.

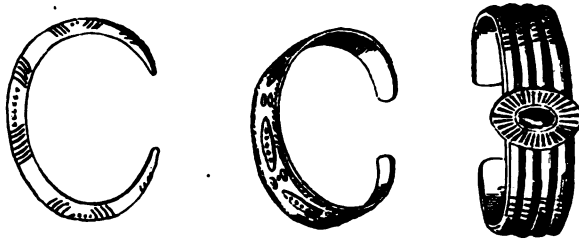
āzāt' bēshāgai, silver bridle; ānīfōl, silver bridle.

ātqā sētqāni, brow band.

ātā sīnīl, or āzāt' bitā sīnīli, concha, bridle button.

The most popular forms of jewelry are bracelets and rings. The wristlet of leather, worn on the left wrist, is now frequently ornamented by a silver disk or plate of from three to four dollars

in weight, some of which are real works of art. Bracelets, too, are strictly ornamental, and are made in multifarious shapes and designs. There are simple round circlets, usually tapering a little toward the ends, and marked with file cuts; others are made



Bracelets.

of a triangular bar of silver, bent in a circle, which leaves a sharp ridge in the center, *ahnf yilkid*; or of a square bar with a groove along the center, *ahnf yildzis*; or a flat plate in the middle with a slender piece on either side to encircle the wrist, *ahnf gintqél*; others are double or triple ridged, or consist of two or three ridged circlets joined or soldered together; then there are flat silver bands of diverse breadth and thickness, weighing from one to three dollars, some marked with file cuts, indentations, scallops, leaf-like, and a variety of other shaped figures, often executed and arranged with a taste and skill that would reflect credit upon any one of our eastern silversmiths. Bracelets are worn upon both wrists, sometimes two



Wristlet.

and more on each wrist. The two ends of the bracelet are not brought together but a space of about an inch is left open; the wrist is pressed sideways through this space, and with a twist the bracelet is brought about the wrist and squeezed to fit.

Keʼó, wristlet; látsini, bracelet.

béshlāgai látsini, silver bracelet; besh lichf látsini, copper bracelet; besh litsóí látsini, brass bracelet.

látsini ntqél, broad bracelet; látsini altsósi, slender bracelet.

látsini nfyís, round bracelet, made of a round bar.

látsini alnf yildzís, grooved bracelet.

látsini alnf gintqél, a bracelet broad in the center.

látsini alnf yilkíd, a bracelet ridged in the center.

látsini ne'ótsé, a bracelet with two or more ridges, in one piece.

látsini aqéshjē, two ridged bracelets soldered together.

látsini aqdashjē, three ridged bracelets soldered together.

látsini aqánā'á, two ridged bracelets soldered together at a few points, leaving for the greater part a narrow space or slit between them.

látsini aqádanā'á, three bracelets soldered together in the preceding manner.

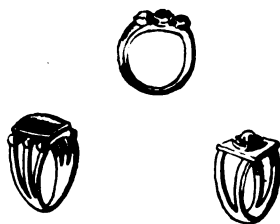
látsini tlish beélyá, a bracelet made in the form of a snake.

látsini alkésgiz, a twisted bracelet.

látsini bikeëshchfni, a bracelet with a design.

látsini do-bikeëshchfni, a plain bracelet, without design.

Finger rings are, perhaps, more in use than bracelets, and their variety as to size, form and design is astonishing. Like the Navaho blanket, no two rings seem to be exactly alike. The men, as a rule, are content with one or two rings, but the women frequently wear a half-dozen on each hand.



yostsá, a ring; besh lichf yostsá, a copper ring.

yostsá áshlé, I make a ring; yostsá deshzházh, worn down ring.

yostsá geéldô, a broken ring; yostsá éñídi, a new ring.

yostsá qastqf, an old ring; yostsá ntqél, a broad ring.

yostsá altsósi, a slender ring; yostsá ntsá, a large ring.

yostsá altsísi, a small ring; yostsá ná'ilgai, a polished ring.

yotsá yijí, a blackened, oxidized, tarnished ring.

yotsá do-bikeeshchíni, a plain ring.

yotsá bikeeshchíni, a ring with a design.

yotsá alkésgí, a twisted ring, made of slender silver wires twisted and soldered into something like filigree work.

yotsá bitsá, a ribbed ring, made of several slender wires brought together on the lower side.

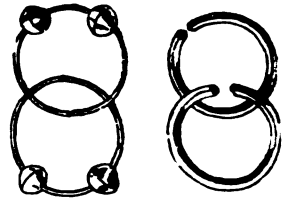
yotsá tsésó biná', a ring with a glass setting.

yotsá dotłízhi biná', a ring with a turquoise setting.

yotsá biná', the set of a ring.

yotsá tłish beélyá, a snake-shaped ring.

Earrings are worn exclusively by men. Silver earrings consist of a smooth piece of silver wire slightly tapering toward the ends, bent into a circle of about one inch and a half in diameter. A sliding silver bead is frequently strung upon this kind of earring, and sometimes this bead is flanked by two smaller beads.



Beside these, many other ornaments are made of silver, such as single and double crosses, stickpins, buckles, hatbands, tweezers, etc. Spoons, forks, butter-knives, sugar-shells, etc., are of very recent introduction, and are made for the whites. Rings, belts, bracelets and pendants are often set with turquoise, garnets, peridots and other stones, and with glass. This, too, is a comparatively recent innovation.

jāghāná'áhi, a silver earring.

jāghāná'áhi yō nūmázi bæ (or bíł), a silver earring with a bead.

chā' bináztł', a hatband.

dāgha beyi'níłzhi, tweezers, (with which the beard is plucked out).

béshłāgai adé, a silver spoon.

The Navaho silversmith is quite fertile and inventive with regard to forms, shapes and designs, or perhaps we should call

him a deft and clever imitator or copyist. The different designs on his silverwork are as numerous and varied as those in the blanket woven by the women. A description of his work will hardly do it justice, it must be seen and examined in order to be rightly judged and appreciated. Most of the names of figures and designs in the following list have already occurred in some of the preceding paragraphs.

chīl bičān, plant leaf.	atā, feather.
nāzhāhi, pendant.	nūmāzi, globular.
dahitqā, crescent-shaped.	dākha nāhālīn, card-like.
só tso, big star.	qāhidænæz, oval.
só tso deshzhā, big-pointed star.	nasdænæz, parallelogram-shaped.
dólāghās, serrated.	deshzhā, pointed, bristly.
tīsh beēlya, snake-like made.	qāhashchī, elliptical.
nāzbās, round.	dahatsós, conical.
názha, pronged.	nā'desghās, a pattern with concentric lines.
dzildsīs, semi-tubular.	beēkelchfhi, steel stamp.
yilkfīd, ridged.	bikeēshchfni, with a design.
ne'ētšé, with several ridges.	do-bikeēshchfni, plain, without a design.
bīhalsā', bowl-shaped.	yostsā āshlé dí bikhē'go, I make a ring after this design.
alkésgiz, twisted.	
nīyiz, round (like a stick).	
bitsā, ribbed.	

POTTERY MAKING.

Unlike most of the neighboring Indian tribes, the Navaho are not conspicuous as potters and make a very rude and inartistic kind of pottery, which in every respect is vastly inferior to that of the Pueblo. Their traditions, however, point to a time in which pottery is said to have been in nowise inferior to that of the Pueblo with whom they lived. With the exception of cooking pots other fabrics, such as waterpots, waterbags or bottles,

bowls and earthen spoons or dippers, were all beautifully decorated with figures of birds, rainbows, deer, antelope, rabbits, ducks, cloud effect (*kös ishchfn*), or any figure not tabooed, as snakes, lightning, bear, badger, hawks, and the divinities.

As in the decoration of the basket, so also the decorative line encircling the body of the pot was left open for the reason that the potter, like the basket weaver, supposedly encircled herself with this decoration and, lest she trifle with her life, must not close this circle about her, but leave an exit for herself.

The early waterpots were shaped much like the wicker bottle, with two loops or eyelets on the sides, and were similarly carried on the back. One side of the rounded body of the pot was made flat so that in carrying it might rest better. These waterpots have now entirely disappeared, though the legends speak of the white, blue, yellow and dark waterpots for conveying the sacred waters of the cardinal points.

The water bottle was provided with a loop, or finger handle, near the neck, so that it might be conveniently grasped in pouring out its contents. They were shaped much like an ordinary pitcher, omitting the spout and handle, and with a narrower neck than that of the waterpot. Later they were entirely abandoned and displaced by bottles purchased from the Hopi and other tribes whose fabrics, though slightly differing from the Navaho ware, were found just as serviceable. Of these many were provided with an additional loop near the bottom of the bottle so that it might easily be suspended from a cord and carried in traveling. Some maintain that the Navaho never made water bottles but always purchased them from the Pueblo. Early history and tradition, however, discredit this strongly, though at present Navaho made water bottles are very scarce.



Earthen spoons or dippers were in shape like the gourd ladle, and were, like it, used for the purpose of dipping out liquids.

The bowl would seem to have been a substitute for the basket at the home. Its name, *letsä'*, earthen basket, indicates both its shape and purpose.



While all of these were ornamented with beautiful figures, the *ásä'*, pot, was completely devoid of ornamentation since it was used for cooking purposes, and in the preparation and boiling of dyes or medicines. No particular care was taken to form them shapely, and though made in different sizes, all were made after the same pattern with rounded bottoms, a hardly perceptible neck, and a slightly flaring rim. A serpentine line, or a few scallops along the outside rim, in addition to depressions made into the body of the pot with the finger or a stick, were the only decorative features about these pots, which in substance remain unchanged to this day.*

The crucibles now in use by the silversmiths of the tribe are in effect cooking pots in miniature, and are provided with one to three spouts at the rim for pouring the molten silver into the matrix.

The ceremonial pipes are conical in shape, and stemless, as the smoke is drawn through a small hole provided in the bottom of the pipe.

This comparatively small variety of pottery made by the Navaho, and their apparent indifference to the art, finds a ready explanation in the great facility with which more shapely and serviceable pottery could be obtained from the neighboring Pueblo Indians. More recently, too, brass, tin and enameled wares promptly found favor with them as far superior to, and less difficult to acquire, than the native or extra-tribal pottery, so that comparatively little earthenware is used at present.

*See illustration on page 218.

Pottery making is a woman's industry, and to-day the Navaho potter may still be found among the older women of the tribe. As the molding and drying process require a large amount of attention and care some unoccupied hogan, or other secluded place, is selected, where the potter might be undisturbed. As a material for most earthenware, a very sticky mud and white clay are used, which may be found almost everywhere, while for the pots a blueish clay, which in certain localities may easily be dug out, is preferred, and from its use in making pots is known as pot material. Small pieces of broken pottery, with which the Navaho country is in places fairly strewn, are crushed and ground to a fine sand, and added to the clay. The whole is then mixed with water and thoroughly stirred until a stiff mud of equal consistency throughout is obtained. A lump of this mud is then taken between the hands and rolled out into long, slender pieces, or ropes; this done, a flat, round cake of the desired circumference is made of a lump of the mud, and serves as the bottom of the pot around which one of the rolls of mud is wound and made fast by pressing and gently kneading with the fingers. A vessel containing water is kept near by into which the fingers are occasionally dipped to prevent the mud from clinging to them, as also to prevent the finished work from drying too rapidly. Another roll is added and fastened in the same way, by which process the potter is enabled to give the pot the desired shape and size.

The molding completed, the whole is then thoroughly smoothed by rubbing the exterior with a corncob, while the back of a gourd dipper is used in smoothening the interior surface of the pot. When still moist small indentations are made in the body of the pot with the thumb or a small stick, and such scallops made around the rim as strike the fancy of the potter, who at times substitutes a narrow serpentine line made of thin strips of mud. No other decoration is added. The whole is then covered with a coating of gum to further its density, after which the pot is placed over a slow fire, made of sheep or cow dung.

and allowed to remain there for several hours until thoroughly baked, after which it is ready for use.

After baking, the pottery (excepting cooking utensils) was decorated with colored figures, the color being applied with a brush of yucca fiber, and prepared from black, red, yellow and white clays or earths, mixed with water. This, however, has long since been discontinued as too tedious.

The cooking pot is still largely in use, both for domestic and ceremonial purposes. In the well-known war dance the pot is quickly converted into a drum by stretching a piece of goat-, sheep- or buckskin across the mouth of the pot and securing it just below the flaring rim. This is tapped with a small round stick producing a dull sound which is kept up incessantly during the entire dance. The earthen pot is also required in the preparation of medicines productive of emesis in the course of some ceremonies.



LIST OF WORDS.

tqósa', or tqóásā', the water-pot.

tqózis, the water bottle.

tqózis yázhe, small bottles or cups.

qashtłışh tqózis, earthen water bottle, designates the Hopi or Pueblo ware.

lětsā', earthen bowl.

hashtłışh adé', earthen dipper.

bīadīlyfhi, in which it is melted, crucible.

nát'ótsé', pipe.

ásā', cooking pot.

(ásā') bikeëshchf, it is decorated.

lējfn, black earth.

letsóí, yellow earth.

dlěsh, white clay.

chī, red clay, which were used in the preparation of the colors.

ásā' yāzh, a small pot.

ásāłtsoi, a brass kettle.

ásā' bidāgi, the spout of the pot, also its rim.

ásā bitłáhi. bottom of pot.

ásā' tľā'i, the half (broken) pot.

nfyiz, round, (a slender, tapering object).

númáz, globular.

bitsé hulóni, the skillet, or griddle.

bes'ésā' (bes'ásā'), a bucket, pail, kettle.

tsin ásā', a wooden (candy) bucket.

tsitsā' (tsintsā'), a wooden box.

naaldóni, large oil cans.

naaldó, it sounds (like a drum).

ásā' tqéli, wide pots, large Hopi pots used for cooking purposes.

ásā' ashlé, I make a pot.

ásā' al'f, pottery material, a blueish clay.

hashtľsh ditsfdigi, sticky mud, mud which clings.

ásā' al'f qáshgyéd (qágyéd, qádeshgól), I dig out clay.

khftsil, or ásatsil, broken (ancient) pottery.

aná'ásā'i, bits of ancient pottery.

ásatsil náhashlá (nahálā, ná-hideshlá), I gather broken pottery.

ásatsil yistsfd (yftséd, destľ), I crush broken pottery.

ásatsil yishká' (yiká', desh-ká'), I grind broken pottery.

khftsil ásā' al'f bil tqáoshní' (tqaiséni', tqáideshni'), I mix broken pottery with the pottery clay.

nisqis (nílqis, dinésqis), I roll (mud) between my hands.

nánesni', it is kneaded.

nánshni' (nanéni' nadfnesh-ni'), I squeeze it.

ásā' biyó', the scallops, or decorative serpentine line on the pot.

ásā' biyó ashlé, I make the scallops on the pot.

ásā' yishjé' (shéjé', deshjá'), I coat the pot with gum.

jé', pitch, gum.

dľlkhó', it is smooth.

qá'ashtlé, it is moistened thoroughly.

nadá bitsfn, the corncob.

dówóligi, indentations made with the fingernail.

bégáshi, or debé bichá, cow or sheep manure.

ásā' yistés (sélté', destľs), I bake the pot.

bikeeshchf ádin, without decoration.

chóhótľ' nľ, an exit is left (on pottery decoration).

bitqáshjá', the loops on the waterpot and water bottle.

See Wickerwork for words relating to transportation of them.

ásā' yish'ál (ná'á', desh'ál),
I carry a pot (in my hand).

ásā' nash'á' (náśá'á', ndesh-
'ál), I carry, pick up a pot.

hashtl'ish ásā', earthen pot.

ásā' bēltqázhi, the pot-drum
stick.

ásā' dādestl'ó', the pot-drum.

ásā' dādishtl'ó (dādætl'ó, dā-
dideshtl'ó), I tie the pot (with
a skin).

ásā' yishqál (yflqāl, deshqál),
I strike the pot-drum.

ásā' yishdôn (yfldôn, desh.
dól), I sound the pot-drum.

ásā' yishtqásh (yflqázh,
deshtqázh), I tap the pot-drum.



BASKETRY.

Singularly enough, the number of Navaho basket weavers is very limited. Yet their fabric is superior in strength and durability to that of the neighboring Apache, Coconino, Pueblo or Pima, and no apparent effort was ever made to displace the native basket by the products of other tribes which offered a larger variety in design and shape. The Paiute alone conformed to the requirements of Navaho ritual, and make a basket which in design, shape and texture is identical with the native patterns. Apropos of this coincidence, many hold that the Paiute borrowed the art from the Navaho, as previous to their association with the latter their textile industry was confined to a rudely constructed wicker bottle (tqóshjē). Some also advance that the

Navaho basket is recognized by the sewing of the final stitches, which the Paiute can not accomplish, and therefor distinguish between baskets of Navaho pattern made by the Paiute (*báyodžín bitsá'*) and those made by the Navaho (*diné bitsá'*). Others consider them identical in every particular, an opinion which is favored by the use of the Paiute basket in any ceremony. But leaving such questions aside, it is apparent that, for reasons of their own, the Navaho are perfectly agreeable to the competition of their neighbors among whom basketry flourishes sufficiently to allow the Navaho weaver to retire.

Basketry is a woman's industry, which is also pursued by the nádle (he changes), hermaphrodites, or men skilled in the arts and industries of both men and women. Basketry, however, is not classified with textile fabrics (*yistló*), but with sewing (*náلكهád*). It is of interest also that, while the basket is in progress, the sewer is untouched and avoided by the members of her family. The material, too, of which the basket is made is placed beyond the immediate reach of the household. Finally the sewing is accomplished with the utmost expediency, and is undertaken by skilled sewers only. Should an unskilled person tamper with this occupation, it is believed that sickness and rheumatic stiffness affects the wrists and joints. This is remedied by the singer who, in the course of a ceremony, clothes both arms of the patient with the skin of a fawn (*bí' yázh*), whereupon a hole is broken into the south side of the hogan through which the patient extends her hand and wrist. As soon as the wrist appears on the outside, her younger sister takes it between her teeth, pressing them lightly into the skin, which supposedly removes the stiffness (*nasdó'*). At present this rite is rarely necessary, but suggests a reason for the taboo (*bahádzíd*) placed upon anything connected with basketry, and for the readiness with which the Navaho decline to pursue the industry.

The dimensions of a basket often exceed twelve to fourteen inches in diameter, and are usually a fraction more than three inches in depth. As a material, the twigs of sumac (*Kí*, or *chíí*-

chín) are used. A triple incision is made into the butt end of the twig, one part of which is held between the teeth while the other two are torn off with the fingers. Each part is then scraped clean of its bark with a knife or piece of tin, and the twigs to be dyed are laid aside in a heap, while the natural color of the twig furnishes the lighter shades of the designs.

The dyes used are identical with those used for coloring wool, though, obviously, the mordant of boiled sumac leaves (kī) becomes superfluous. Cedar ashes supposedly add luster to the color and contribute to its adhesive quality. Black was obtained from surface coal (lējín), added to boiling sumac leaves (kī), or from a sulphurous rock (tsékhô), slightly roasted (iltés) with pine gum or rosin (jě'). When ready this was added to the boiling twigs giving them a lustrous black color similar to charcoal (t'ésh nahállín). The root of juniper (gād behétfól) and mountain mahogany (tséésdāsi behétfól) are boiled together, after which the ground bark of alder (kīsh yikágo) is added to obtain a pale red, into which the twigs are immersed. At times the joint fir (t'fō' azéhi, *Ephedra trifurcata*) is substituted for alder bark, while cedar ashes add luster to the color.

Blue was frequently obtained with indigo, though a native blue is also prepared from a blueish clay or ochre called ádish-tfsh, which is pulverized and mixed with water. Various shades of yellow are obtained with plants like *Bigelovia* (kíitsōi), the sneeze weed (nāéshjā ilkhéi, *Helenium Hoopesii*), or the sorrel (jāt'ni), the flowers of which are crumpled and boiled, with cedar ashes thrown in. (Cf. Weaving.)

The dyeing done, the twigs, both colored and uncolored, are placed in water to render them moist and pliable. The butt ends of the first twigs are wound around a small stick known as the bottom of the basket, and secured there with yucca. An awl, made of deer-bone (bī' bikhétsān), is now used in sewing the basket for which an iron awl is found impracticable. The sewing is always done *sunwise*, or from left to right, giving the basket the shape of a helical coil when finished. Much deftness

and constant application are required to obtain a close weave which will hold water after a few minutes moistening, while baskets of inferior quality require moistening much longer.

The designs are, of course, woven with the colored twigs. Yellow and blue, however, are now rarely used, and the usual pattern is a band three to six inches wide, woven with zigzag edges in black with a line of red running through the center, and set, as it were, on a light background made of the natural color of the twig. Or, this band is sometimes displaced by a set of four or more square figures woven at intervals, with a colored circle entwining the lower part of each square. The colors in this and the first pattern might be distributed at will, and the colored band of the first pattern might be increased to two or more according to taste. Both patterns are designated as *tšä'*, basket, without reference to their designs. Of the two extinct patterns, the *tšä' netsé'*, or coiled basket, presented a design of vari-colored coils following each other, while the *tšä' hókhāni*, or basket of enclosures, presented a set of four triangles whose apices rested on the center or *bottom* of the basket. From the base of each of these triangles three squares, increasing in width, extended to the rim of the basket, giving the whole design a shape similar to the Maltese Cross. While no special rules were laid down with regard to the blending of colors, or the number of figures and circles in a design, it was essential that every design be broken or intersected by a line of uncolored twigs. In baskets with circular designs this was comparatively easy, but in the *tšä' hókhāni*, or basket of enclosures, it was found necessary to intersect one set of squares in order to make this line quite apparent. It was therefor called *qāātqīn* (*qātqīn*), the way out, or *chōhōt'*, the line leading out, and was prescribed lest the sewer, in bending all her energies and application upon her work, *enclose* herself and thus lose her sight and mind. A parallel is found in overdoing weaving, singing, in amassing a fortune, or in the opening left in the figure of the queue and bow. (Cf. War Dance.) This intersection always runs in a

radial line with the close of the seam on the imbricated rim of each basket, which in turn serves as a guide in the directional assignment, as the close always faces eastward. Hence the singer always looks or feels for the closed rim, designated as *bidá' ástl'ó*, where the rim is woven (instead of sewed). The details involved in mending this rim, as well as the taboo placed upon the wearing of a basket as a headgear, the legends of the origin of the basket, and relative subjects, are beyond the scope of the present work. Suffice it to say, that the basket is made exclusively for ceremonial use, and is an integral part of every rite, as none is holy (*diyfn*) without it.

The strength and elasticity of the Navaho basket renders it serviceable as a drum, in other words, *it is turned down* and beaten with the drumstick. Should it be *turned up* again before the close of the ceremony, it indicates that the singer has suspended the continuation of the ceremony. The basket is also used as a receptacle for the rattles, prayersticks, stones, herbs, medicines, and like ceremonial paraphernalia. The ceremonial bath is administered in the basket. The mask of the Fringed Mouth (*záhadolzhái*) is supported on a basket from which the bottom has been cut out. At the marriage ceremony a new basket is required in which to serve the porridge. As it is frequently impossible for the couple to consume its contents, the basket is passed around to the visiting guests. Whosoever consumes the final portion of the porridge also takes possession of the basket, wherefore baskets thus obtained are designated as *táa' na'obáni*, or the basket which was won. It is otherwise referred to as *danákhān bí'odáni*, the basket from which they eat the porridge. The so-called wedding basket is therefor unknown.

In the early days baskets were woven of yucca braid. The pith of the yucca leaf was extracted and dyed in the same manner as sumac twigs to-day. It was also permissible to use the designs of the basket in the decoration of the uppers for moccasins made of yucca.



The remnants of twigs used for baskets are employed in constructing the so-called owls (náshjá). Cf. Bugaboos.

WORDS REFERRING TO THE BASKET.

- tsā', the basket; tsā' nāshkhād, I sew or make a basket.
 kī, or chīlchīn, sumac.
 kī qashā (qaséyā, qadeshāl), I gather sumac twigs.
 tsāzī' ntqēli, yucca (broad-leaved); kīsh, alder.
 kī yīlzhf, blackened sumac (for dark color).
 kīsh beyilchf, reddened with alder.
 bakhāgi bāhishé (bāhīshē, bādeshī), I scrape the bark off.
 kī yīshdlād (yīdlād, deshdlāl), I tear the sumac (in strips).
 tsā' bitfāhi, bottom of basket (center of helix).
 nāhīnestse', helical (coil); bidā' astfó', imbricated (woven) rim.
 bidā' ashtfó (séhtfó, deshtfó), I close (weave) the rim.
 nāshchā, a design (in basket).
 nōltfīzh bikeeshchf, zigzag (line) design.
 tsā' alnf na'fchī, red line in center (of basket).
 qāqtqīn, the exit, the intersecting line of the design.
 nādle, a man performing woman's work.
 nāltōgo, or nālzhō, moistened with water.
 tqō do-baghāgyēd-da, water-tight, water does not flow through.
 tqō baghādāhāzīn, it leaks, water flows through.
 tsā' nāshtle (nséltē, ndeshtfó), or tsā' nāshō (nshēsho, ndēsho), I moisten the basket.
 tsā' aqētqi, the basket is tightly woven, or tsā' aqīnestqi, a tight basket; tsā' nāneszā', a loosely woven basket.
 tsā' yāsetqā, the basket is down, or yānādaātqi, the basket is turned down.
 tsā' yānshtqī (yā'ntqā', yā'ndeshtqī), I put the basket down (for the drum), hence, tsā', the basket drum.
 tsā' yīshkhād (yīkhād, deshkhāl), I strike the basket (drum).
 tsā' bēyikhād, the drumstick, which is made of tsāzī' ntqēli, broad-leaved yucca; tsā' bēyikhād ishē, I make a drumstick, or rather tsā' bēyikhād bikfīdsīz (bikīdēdiz, bikfīdidesdīs), I wind

the drumstick. The yucca is wound around two folded yucca leaves in about four sections. The ends of the winding string are secured within the folds and corn pollen is inserted; *tšá' bəyikhád nadá ašé bitqá'ilé*, medicine of corn inserted in (or fed to) the drumstick.

tšá' bitqádaagis biniyé', basket for bathing (ceremonial).

tqá'níl tšá' bihíkhá, mush put into the basket (for the nubility ceremony); *bíhishkhá* (*bíhíkhá*, *bídeskhá*), I put into a receptacle; *tšá' tqá'níl bésákhá'*, the mush is (now ready) in the basket; *tqá'níl tšá' bijihashkhá* (*bijihákhá'*, *bijihádeskhá*), I put the mush into the basket; *tqádidín biyístsé* (*biyíltsé'*, *bídestsé'*), I put pollen on the mush and eat; *tqádidín bídzíltsé'* (*bídzíltsé'*, *bídzóltsé'*), pollen mush is eaten, indicating that the ceremony will take place; (*tšá' biyf*) *tqádidín alnáoshníl*, pollen crossed in the basket; *alnáoshníl* (*alnáiséníl*, *alná'ideshníl*), I cross it, put it across each other.

WICKERWORK.

In addition to the basket just described, the water bottle and carrying basket are the only other objects of wickerwork made by the Navaho.

tqóshjé is probably a contraction of *tqó*, water, and *yishjé*, it is closed with gum, from the fact that the wicker bottle or jar is covered with a layer of gum or pitch. These bottles are made of, or sewed with sumac, willow, or other pliable twigs, in the shape of a large vase with a rounded bottom, a globular body, and a long, narrow neck with a flaring rim. A small loop of plaited horsehair is woven into the jar at either side. An awl is the only instrument used, and no particular care is taken to weave very closely, as the jar is rendered water-tight by a covering of pine or piñon gum over the whole inner and outer surface. The gum is heated and poured into the jar, and by inclining and turning is brought



in contact with the whole inner surface, after which the surplus pitch is poured off. A heated pebble is then thrown inside and vigorously shaken, which is said to remove any hardened lumps, and gives the interior a smooth surface. The exterior, too, is now covered with gum, which in addition is daubed with red clay to obtain a reddish hue. Any unevenness is then removed from the surface by pressing a heated pebble over it.

These jars have no lid, but a bunch of grass or sage bark is stuffed into the neck of the jar to prevent the water from splashing out. A cord or rope attached to the loops on the sides of the jar is slipped over the shoulders, or across the forehead, with the jar resting on the small of the back, so that it can be conveniently carried in this manner for a considerable distance. Their capacity is from one to two gallons, though the larger sizes have a greater capacity. They are not plentiful, and are being displaced more and more by the modern pail and bucket.

In earlier days a waterbag was also used. This consisted of a piece of buckskin stretched over a hoop to form a bottom, with the ends of the buckskin brought upward and secured to a very small hoop for an orifice. It was called *tqó ázís*, waterbag, or *tqó ábíd*, water-paunch, as later the paunch of a cow or sheep was employed instead of buckskin. The modern bottle is called *tqózís*.



The carrying basket is even less frequently seen than the water jar. *tsí'zís* (*tsí*, hair, and *zís*, or *ázís*, a bag or pouch, from the mode of carrying it over the hair of the forehead) is used at present for gathering the *hashkán*, or yucca fruit, for syrup. The baskets are plaited of willow twigs much after the style of our own baskets, but have neither handle nor finished rim. Instead, a cord is fastened to two of the staves or bows, and the basket is carried exactly like the water bottle, but the cord is preferably slipped over the forehead or scalp. At times they

are strapped as a pack to either horse or burro, one basket dangling from either side.

A basket of the same type is sometimes made on the field for conveying the yucca fruit. It consists of two staves or bows made of oak twigs, crossed in the center and brought upward, where they are attached to a hoop. This rude framework, in turn, is covered with goat or sheepskin, which is sewed to the hoop, while a cord attached to two of the staves completes the temporary equipment of the basket.



WORDS.

tqóshjē, wicker bottle, water jar.

kī, sumac, etc., see Basketry; kaī, willow.

tqóshjē ashlē, I make a water jar, or tqóshjē náshkhād (nasél-khād, ndeshkhāl), I make, sew a water jar.

tságai be tqóshjē náshkhād, I sew the water jar with a bone awl.

jē dishqf' (dīlqī, dīdeshqf'), I melt pitch or gum.

jē dēlqīgo, melted gum.

tqóshjē bī'fzīd (bī'fzīd, bīdésīl), I pour (gum) in wicker bottle.

tqóshjē tsē' áwózi bīnānsdzīd (bīnānéldzīd, bī'ndfnesdzīl), I shake a pebble in the wicker bottle.

tqóshjē deilkóligi, the grooves or crevices of the jar.

tqóshjē yishjē (shējē, deshjá), I glue or cement the wicker jar. This expression is used for covering the exterior (bakhādæ) with pitch.

tqóshjē yishchf (shéchī, deshchf), I color the water jar red. Red clay (chī) is mixed with water and spread over the layer of pitch.

dádadeshjá', it is water-tight, it is cemented, from dádeshjá' (dádehjē', dá'didoljá'), it is glued, soldered with gum.

bitqáshjá', the loops, or more exactly, kī bitsé yishbīzhgo bitqáshjá', the loop of braided horsetail hair on either side.

bidági, the rim of the jar.

tqó qadishbín (**qadéibín**, **qádídeshbíñ**), or **tqo áshlé** (**áshla**, **adeshlí**), I fill it with water, I get some water.

tí'ò, grass; **tsá'** **bizhí**, bark of sagebrush; **ánádiníjöl**, or **ádádiníjöl**, a bunch of grass (etc.) for a lid, both words from **ánádinshjöl** (**ánádfnájöl**, **anádfdeshjöl'**, and **ádadinshjöl** (**adádfnájöl**, **ádadfdeshjöl**), I close it with a bunch (of hay).

tqóshjē nájíj, the water jar is carried on the back.

tqóshjē nashíj (**nashéíj**, **ndéshíj**), or **tqóshjē yishíj** (**ííj**, **deshíj**), I pack or carry the water jar on my back. This is also definitely expressed as follows: **shitqá be nájshíj**, or **sítsí be nájshíj**, I pack it with my forehead; **sowhós be nájshíj**, or **yishíj**, I pack it on my shoulders; **tqóshjē bitíöl**, the water jar cord.

tsízís, the carrying basket; **hashkán benájíj**, yucca fruit is carried with it; **baghántígo ba'á'tí'go benájíj**, it is carried by a line (string) passed through an opening and around (the staves or bows).

tsízís bitíöl, the cord of the basket; **tí'zí khági tsízís**, goat-pelt basket; **debé khági tsízís**, sheep-pelt basket.

násbás, a hoop; **bidá gúnā náskhád**, sewed in the rim (the hoop of the pelt baskets), otherwise the basket is not said to have **bidági**, a rim.

ñ (**tqéli**, burro) **tsízís bádasēñí**, basket on either side of a horse, baskets used as a pack. Other expressions for carrying or packing are the same as for the water jar.

ñ bitsé yisdíz (**sédiz**, **desdis**), I twist horsehair (for loops).

tsízís yishtíó (**sétíó'**, **deshtíó**), I weave, make a carrying basket.

tsízís ashlé, I make a carrying basket (of sheep- or goat-pelt).

tsízís bánas'ági, the (four) staves of the carrying basket.

tsízís bidá nas'áhi, the staves extending over its rim.

tsízís bitíáhi, the bottom (crossed staves) of carrying basket.

BEADWORK.

Beads for necklaces are frequently purchased from the Pueblo Indians, notably the Zúñi, the value of a strand depending largely

upon the consistency and age of the shell. Beads of hard stone, such as turquoise, red stone, olivella shell, etc., are added to these strands of white shell according to individual taste. These, and beads made of conch, or tortoise shell, purchased from the traders, are perforated with a kind of bow-drill consisting of a slender drill-stick of hard wood, and a crosspiece of soft wood, to which a string is attached at both ends and passed with a single twist through a hole in the upper end of the drill-stick. The crosspiece is provided with a hole in the center large enough to receive the drill-stick and allow of a free movement up and down, while the string is passed through two small holes at each end of it. A small stone disk is fitted near the lower end of the drill-stick to steady its motion, and the point, usually secured with sinew, generally consists of a strong wire nail. A few twists between the fingers entwines the string about the drill-stick, which is then set over the stone, or small shell disk, and made to spin by working the crosspiece up and down. In this manner the string is twisted and untwisted until the perforation is made.



Comparatively few spend their time and patience in making beads, as shell and coral beads are easily purchased or exchanged. The bow-drill is still in use for perforating hard stone, especially turquoise. These are polished and smoothened by rubbing on sandstone before perforating them.

yō bebaghāda'nfli, bead perforator, bow-drill; bitsfn, the drill-stick; bitlōl, the string; bā'nāsetqānigi, the crosspiece.

yō bēbaghā'nshnīl (baghā'nīl, baghādesnīl), I perforate beads.

jātōl, turquoise ear pendant (hajētōl); jaghāna'āhi, (round), silver earring or pendant; ja baghāhodzā, pierced ear.

yō lichf, coral beads; yō lagaf, white (shell) beads.

bizē dejē, necklace of coral bead strands; bizē nātī', any necklace of coral or silver; dālai ntī', a single strand of beads.

LEATHER AND RAWHIDE WORK.

Formerly the hide of deer, antelope, elk, the bighorn, and other animals, were tanned with studious care, and used in the manufacture of the costume, of pouches, shoes, and similar articles. Yet, as the early Navaho despised and shunned labor, and preferred to barter with the neighboring Utes for well tanned hides, so, also, the present generation feels no hesitancy in abandoning laborious and tedious native industries in favor of a serviceable and ready-made article, which accounts for the comparatively meager product in leather and rawhide work. Some of these are mentioned and described in the following.

TANNING.

Tanning is done in the following manner. The hide is allowed to soak in water, without any changes, for about a week or so, when it is pinned slantingly from a post to the ground, and the hair and remnants of flesh are scraped off with a scraping stick. It is now soaked again, after which it is secured to a beam or tree and twisted by means of a stick. After remaining in this twisted condition for a day or so it is untwisted and again soaked and retwisted. This is repeated for several days, after which it is spread out and covered with sand to make it pliable and moist. Meanwhile the smoke-hole and entrance or doorway of the hogan have been covered with blankets to exclude the air as much as possible. The hide is now brought in and stretched quickly, after which it is thoroughly rubbed with the brains of sheep and allowed to dry. If robes are desirable, the skin is dressed in exactly the same manner with the exception, of course, that only the surplus flesh is removed. Deer, elk, antelope, goat and calf-skins are treated in this manner, while goat, cow, sheep and horsehides are merely hung up to dry or pinned down and covered with dirt and dried.

The ceremonial skin is also treated or dressed in this manner, the difference being in flaying the animal. After drawing a line

with pollen along the breast and stomach, as also along the arms and legs of the deer, a symbolic incision is made with rock crystal and the hide is then cut with a stone knife.

WORDS REFERRING TO TANNING.

bi' nash'á', or **ná'ash'á'**, I skin or flay a deer (**nsél'á'**, I have skinned it).

bčēldzē, (the tanning stick), scraping stick, which is much the shape of a batten-stick.

bakhāaldzē, scraping frame.

asdzē, I remove the hair.

bedāhandīqāsi, the twisting stick.

dāhadīqās (**dahadīstqās**), I twisted it up.

lēdistās, I put it into the ground.

atsighā, sheep brains.

ēēshni, I rub with brains.

assē, I tan or dress a skin.

bi' bakhāgi yissē, I dress a deerskin.

ākhāgi, an undressed hide.

yīldzā, an untanned hide with the hair removed.

abāni, a dressed hide.

igāi, a dressed elkskin.

asgā, a dried skin.

bi' bakhāgi, a deer robe.

li, **bégashi**, **debé** and **tīfzi bakhāgi**, horse, cow, sheep and goat-pelts.

tīfzi bisgā, etc., a dried goatskin.

ilzē, a smooth pelt, which has been freed of wrinkles.

ayān bakhāgi, buffalo hide.

chīdi, a buffalo robe.

DYEING OF LEATHER.

The uppers for the moccasins are dyed with native colors in black, red and a light yellow. The preparation of these dyes is in substance identical with that described for the wool, though they are not applied in the same manner, and no attempt is made at substituting analine colors.

BLACK DYE.—The ingredients for the black dye are sumac, pitch and ochre. The twigs of sumac (**li**) are boiled in an earthen pot, after which they are removed and the solution retained. The pitch and ochre are then slightly roasted and slowly added

to the solution, which is placed over the fire again and continuously stirred while the gum-ochre is being added, and until it has completely dissolved with the sumac solution. The concoction is then allowed to cool off, after which it is applied to the surface of the leather with a tuft of wool for a brush.

RED DYE.—The root of juniper and mountain mahogany serves as an ingredient for the red dye. This is well crushed and boiled, after which the solution is poured off and a mixture of pulverized alder bark and cedar ashes added to it, when it is replaced over the fire and allowed to boil again. It is then applied warm to one or both sides of the leather, which at times also is immersed in the solution.

YELLOW OR ORANGE DYE.—To obtain the yellow dye the flowers of the golden rod (*kiltsoi*) are boiled, to which a quantity of rock alum (*tsé' dokózhí*), previously roasted in ashes, is added. This, with a pinch of paper clay (*ní'hadlád*), is again boiled, and when thoroughly dissolved and cooled off is applied with the wool brush, producing a light orange color.

WORDS.

kí shibézhgo, the sumac is boiled; *je' dílidgo yit'ésgo*, the pitch is burnt and roasted; *nda' tsékhó' aido yit'ís, sítégo*, and ochre, this, too, is roasted and boiled; *ákhó lizhín ilé'*, in this manner black (dye) is made.

dzitsíd, it is crushed (from *yistsíd*, I pound).

dizaf ilé', it is crumbled, pulverized.

kí bitqō, or *bitqōé*, the solution of sumac.

áitso ndo'ól (*ndí'él, ndído'ól*), it is entirely dissolved.

ndajishí abáni, they dye buckskin black.

kísh, alder; *sagángo yikágo*, dried and ground.

tséhesdāzi behétlōl, the root of mountain mahogany.

yitsédgo t'a bizhán, this is well crushed.

gād dílid (*leshchí*), burnt cedar (ashes).

bijijf, they put in (from *biyishjif*, I add granular objects to others).

kiltsoi, bigelovia; tsé' dokózhí, rock alum.

lëshibézh, roasted in coals; nī' hadlād, blue clay, paper clay.

niKé' (nezKé', dīnokel), cool, cooled off.

nishKé' (néKé', dīneshkel), I cool it off, allow it to cool.

abáni (or akhál, leather) yishf' (yishf, yideshfl), I dye buckskin black; abáni yishchf (yīlchf, yidëshchl), I dye it red; abáni yistsó (yītsūi, yidéstso), I dye it yellow or orange.

yīlzhf, the black dye; yīlchf, the red dye; yīltsūi, the yellow dye; yīlzhf béshtlo (besétlō', bīdeshtlō), I spread the black, etc., color over it, or yīlzhf bīdinsbqīsh (bīdinsyīzh, bīdīneshqīsh), I rub black, etc., on it.

SHOEMAKING.*

The art of shoe- or moccasin-making is a very simple one and practically confined to the men, most of whom are able to make, or at least to repair, the moccasin. The tools used are few in number, only an awl and a knife being necessary, and these are very often combined in a two-bladed pocketknife, whose smallest blade has been rubbed down to form the awl. The primitive bone-awl, made of deer-bone, and known as tsáigai, the white awl, and other bone awls (tsāintsā) are rapidly disappearing, being displaced by the needle (tsā tsōsi), which is driven into a wooden handle, or fastened with sinew or cord between two sticks of a convenient size. As a practical instrument the stone knife, too, has long since disappeared, and is now confined exclusively to ceremonial purposes.

In the manufacture of a moccasin three materials are used, a rawhide for the sole, buckskin for the uppers, and the loin-sinew of sheep, goat or deer, though the latter kind is rapidly disappearing. The primitive footgear consisted of a sole made of yucca, with uppers of badger or wildcat skin, which later was entirely displaced by buckskin. The thick neck of both deer and badger were used for the sole, which at present is almost

*For much of the data contained in this article we are indebted to some unpublished MS. of the late A M Stephen.

exclusively of rawhide. A piece of rawhide of a suitable size having been procured it is at first pounded with a stone until it becomes somewhat flexible, when the hair is scraped off, with no particular care of removing it entirely. It is then buried in moist ground or sand for two or three days to render it soft and pliable. When taken from the ground the Navaho sets his or her foot upon it to obtain the size of the sole, which is cut out about half an inch larger than the size of the foot, and leaving a margin of an inch extending at the toe. The cut-out soles are then held to the fire and thoroughly rubbed with tallow or fat (on the hair side).

The shoemaker now fits the sole to the exact size of the foot, bringing the edges well over the sides of the foot, and the tip well over the big toe. By kneading and pressing the edges with the fingers and the teeth the exact impression of the foot is made on the sole. The uppers usually consist of but one piece of buckskin, which method is found more practical than securing two pieces with thongs as is sometimes done. However, the uppers are fitted and cut out to enclose the foot snugly, yet without compression, leaving the ends sufficiently long to wrap one end well around the ankle, overlapping it with the other, in which fashion it is secured with silver buttons or thongs on the outer side of the foot.

The measures taken, the shoe is ready for sewing. A few fibers of sinew are then torn from a supply usually kept on hand, passed through the lips to wet them, and rolled on the knee to a stout thread. Two of these, each sufficiently long for one shoe, are rolled and tied together. It is often more convenient, too, to fasten the uppers and sole at the top and sides by means of a few temporary stitches. This done, a hole is bored through the sole at the tip, and both threads are passed through to the knot. With one of the threads the left, with the other the right, side is sewn. There are, however, various styles of stitches used.

The most simple stitch is that known as *bikidesdizi*, it is wound around, which in process is the same as winding a thread around

a stick, hence the name. The outer rim of the sole edge is completely hidden by the upper, which fits snugly over it. Holes are punctured close together and simultaneously through both the upper and the sole, while the thread is always passed through from the side of the sole. The stitch is therefor clearly visible. It is used in sewing the heel, even when another style of stitch is used for the forepart of the shoe, and is ordinarily employed for repair work. The moccasin sewed in this style is called (khě) *bikfdesdizi*, or *khě bikfdesdizgo nāskhādi*, shoe sewed in winding.

Another stitch, usually made with two threads, very much resembles the stitch used by saddlers in sewing leather. Both the sole and uppers are punctured, and the threads passed through and fastened from either side. Accordingly, this is *alnāhātsī*, stitched through the center, or cross-stitched.

A third style of shoe is made by passing the thread through the outside rim of the sole, and making a short longitudinal stitch on the surface of the upper near its edge, drawing the sole to the upper. Hence, *bił yaadlō nāskhadi*, a seam which draws it together.

An invisible and fancier stitch is obtained by passing the thread through the inner rim of the sole, and making a short stitch on the surface of the upper, and drawing both together. The seam is thus hidden in the joint of the upper and sole, allowing the surface of the rim of the sole to extend slightly above the seam edge. This seam, however, is discontinued at the instep and another employed in its stead, so that the instep and ankle present a flat, close edge. This style of shoe is known as *khě bitqāfā' itsī*, the shoe seamed in the groove.

Similar to this is another style called *khě bakāy' itsī*, the shoe with the inside surface seam, which is obtained by longitudinal stitches made on the surface of the upper and the inner surface of the sole, which brings both flush together and makes the seam invisible. The edge of the sole, too, extends over the seam, though from the manner of sewing, the edge is not drawn toward the seam as in the preceding stitch.

The shoe is always sewed and repaired after moistening the leather. Accordingly, the torn moccasin is buried in sand for a night or so, and the process repeated if the leather prove insufficiently pliable.

Silver buttons, fastened with thongs, are now generally used instead of mere thongs for securing the shoe at the ankle. At home the moccasin is often discarded, as also in wet weather, while in winter it is protected with wraps made of gunnysacks, or the pelt of a kid, lamb, sheep or goat, with the woolly side turned in. The latter are known as *khě chūgi*, shoes or overshoes which make the noise, *chūg, chūg*, in treading the snow. (Cf. snowshoes under Snow.)

The ordinary moccasin is used at public dances, as also for the moccasin game (q. v.)

In an article entitled, "The Navaho Shoemaker" (Proceedings of the United States National Museum, 1888, pages 131 et seq.), the late A M Stephen exhibits a so-called Navaho dance shoe. This figure, however, represents a type of shoe now no longer in use, but which, previous to the introduction of buckskin, was quite generally used in war and raids, and was made of yucca strands or other pliable grass. The yucca was treated as in ordinary yucca fabrics, that is, it was boiled and ground to a pulp to extract its pith. This was then woven (*yistlō*) and braided (*bitqātā yishbīzh*), both for the uppers and the sole, unless badger or other hides could be had for the latter. In this case the upper and the sole were sewed with field rat or badger sinew, otherwise yucca strands were employed in sewing. When convenient, porcupine quills were inserted into the yucca seam, weave and selvedge for decoration. Two lobes, made of hide or twisted yucca, were furnished on the sides of the uppers to facilitate slipping the shoe over the foot. At the heel a spur of twisted yucca was secured for the purpose of effacing one's tracks in war, as this odd type of shoe was made for no other purpose than to elude an enemy. Hence, after the introduction of the present moccasin of buckskin, the yucca shoe

(tłókhé) was not altogether discarded, but was frequently made and carried on raids and in war. Some specimens are still extant, but are kept as family relics, like the shield and spear.

The present type of moccasin was originally furnished by the Utes, who were better skilled in tanning and buckskin work, and at one time were not hostile to the Navaho. These early moccasins were frequently decorated with beads and porcupine quills, which later, however, disappeared entirely. Accordingly, then, no specially designed moccasin was prescribed for dancing, as the rites seem to disregard the footgear entirely. Tradition, too, takes no offense at dancers appearing in their every-day moccasin, while on the other hand it is regarded as an unwarrantable innovation that some of the younger dancers set aside a pair of nicely finished buckskin moccasins for no other purpose than to appear at the yēlbichai or other public exhibitions.

WORDS.

khē ēshlē, I make moccasins (shoes).

khékhāl, the sole, sole leather.

akhāl, a hide; akhāl yishé (yíshē', desh'), I shave, scrape the hair from leather.

khékhāl lēdishlé (lēdlā, lēldeshlē), I bury, put the shoe leather in the ground.

khékhāl yisé (yisá', desél), or khékhāl yistsíd (yítsēd, destsíl), I pound shoe leather.

ídishgyesh (ídílgízh, ídideshgísh), I cut out (sole); khékhāl ídlílgízh, a sole cut out; adídishgyesh (adídishgízh, ádíldeshgísh), I cut out (leather) for myself.

khēlchí, or khēlchí (khē) bíndé, the uppers of the moccasin.

khēlchí ídishgyēsh, I cut out the uppers.

tálgai, white (deer-bone) awl; tántsá, bone awl; bestá, metal awl; besh bēnaakhá, metal needles, and tsín bēnaakhá, wooden needles (made of rosebush), were used to sew selvedge and tassels on saddle blankets.

atáíd, sinew (usually deer); dítsíd, tough, strong.

tłzi bitsíd, goat sinew; atsíd ntsqás (go yisdíz), heavy (twisted) sinew, which is used in the stitch called bitqátá'ítsi, the groove stitch; tsá tsósi, the needle, also the awl made of a needle or darning needle; tsá tsósi bēnālkhād, sewed with a needle, a sewing needle.

ná'áshkhād (naséłkhād, nádeshkhāl), I sew.

baghānstse (baghāntsi, baghādestsi), I puncture, perforate.

baghāda'astsi (baghādasetsi, baghādadesitsi), I puncture, make holes.

baghānshťé (baghānt'i, baghādesht'i), I put (sinew) through the hole.

baghāda'asht'i (baghādasélt'i, baghādadesht'i), I put (sinew) through; distsód (déltsód, destsól), I stretch or pull (the sinew).

khě bikfidesdzi, or khě bikfidesdizgo náskhād, shoe with winding seam; alnāhāotsi, or khě alnāhāotsigo náskhādi, shoe with the cross-stitch seam; bilyaādló náskhādi, or khěbił yaādló, which is drawn to the sole; (khě) bitqátá'ítsi, hidden seam shoe; (khě) bakáyí'ítsi, inside surface seam shoe.

bikhétqāl, the heel of the moccasin; bikhēni, the instep of the moccasin; hakhélād, hakhé ládi (shikhé ládi, my), the tip of the moccasin (inside); hakhé bilátqāi, the tip of the moccasin (outside).

khě bikhédæ, the heel leather, or wrap around the ankle.

baghāgīzh, buttonhole; yō nłchfni, button, silver button.

khě dāhashchá' (dahāłchá', dahidэшchā'), I tie the moccasin (with thong); yō nłchfn bédahashchá' (nt'é), I button it.

khě yilzhi, blackened (upper) shoe; khě yilchi, red (upper) shoe; khě yiltsói, yellow (upper) shoe; khétsīni, (men's) low moccasins; khě ntsái, (women's) high moccasins; awé, or alchfn bikhé, baby or children's moccasins; khě bikfidesdzi, footwraps of women (leggings); khéndotsósi, shoes (American); khéndotsósi bidági nnézi, or khéndotsósi dégo nnézi, (which are long above), boots (American). Shoes and boots are purchased.

khě shfghā (nt'é), the shoe fits me well, or tã shfghā; khě shé ntso, the shoe fits my foot, or shfnél'á' (nt'é), my size, or tã shé ntso, tã shfnél'á', just my size; do-shfghāda, it does not fit, and

so on of the other two words; khě shínestqí (n'té), the shoe is too tight; khě dasho'ál (n'té), the shoe is much too small (too tight a fit).

shikhé baghāzhāsh (baghānzhāzh, baghādozhāsh), or baghāt'ōd (baghānt'ōd, baghādot'ōl), my shoes are full of holes.

shikhé nēhēzhāsh (nēhæzhāzh, n'hidozhāsh), or nēhēt'ōd (nehez-t'ōd, nēhidot'ōl), my shoes are torn, worn out.

shikhé nāōdlād (nāōsdlād, na'idodlāl), or nāōzhāsh (nāōzhāzh, neidozhāsh), or nāōt'ōd (nāōzt'ōd, néidot'ōl), my shoes (its seams) are torn.

bidāndinsh'ā' (bidāndinā'ā', bidāndīdesh'āl), or bīdadinsh'ā' (bīdadinā'ā', bīdadīdesh'āl), I close, repair the shoe.

khě asht'elné (asht'élya, asht'édolnīl), or khě álya (pr. alné', adolnīl), the shoe is finished, done.

khě análné' (anályā, ándolnīl), the shoe is remade, repaired.

khě shijé (khéshījē), the moccasin game (q. v.)

khéchūgi, overshoes or wraps; tsikhé, or yāsgokhé, wooden shoe, or snowshoe; t'ō'khé, grass shoe, the yucca shoe.

LEATHER WORK.

In addition to the manufacture of saddles and shoemaking, a variety of articles are made of leather and rawhide.

The Navaho make leather pouches from five to six inches square, with a flapping lid extending about two inches over the pouch. These serve as receptacles for tobacco, matches, pocket-knife, money, and other small articles, as in the earlier days they contained the steel and flint, corn leaves and tobacco, pollen, and the dice used in gambling. The pouch is occasionally worn by some of the older members of the tribe, though the younger generation discard them, preferring modern clothes, which are usually well supplied with pockets. It is carried on the left hip, and is attached to a strap passing over the right shoulder. Both pouch and strap are often decorated, the latter especially, with a profusion of small silver buttons.

The belt, consisting of an ordinary leather strap, is usually hidden under massive silver disks, and buckled in front with a silver or other buckle. The belt is worn by men, women and children, and is adorned accordingly, with from seven to eight of these silver disks. The cartridge belt, however, with profusely decorated holster, containing a pearl-handled six-shooter, appeals very favorably to many of the younger Indians, so that the use of the silver belt is confined almost exclusively to women and maidens. They are worn by the women on journeys and festive occasions, and in addition to the sash.

The wrist-guard consists of a piece of leather about three inches wide, which is laced with buckskin thongs on the inner side of, and tightly fitting, the wrist of the left hand. A heavy silver plate, often of exquisite workmanship, and with beautiful turquoise setting, decorates the guard on the outer side, as the wrist-guard largely has no other than an ornamental purpose.

This is equally true of the headstalls which occasionally are used in riding. They are made of an ordinary leather strap, and heavily ornamented with oblong silver plates, which are clasped to the cheek straps and the head-band. In addition, two conchas of silver are fastened with thongs at each end of the head-band, while two silver pendants dangle at the sides of the headstall. Silver bridles are much in favor with the women who use them on public occasions. More frequently they are placed in pawn with the storekeeper, as ready-made headstalls may be purchased at a small cost.

WORDS.

dā' nayfzi, (which shake or move in walking), leather pouch.

dā' nayfzi aqānbfnshgyēsh (aqānbfnlgīzh, aqānbfdeshgīsh), I cut out (leather for) the pouch.

dā' nayfzi nāshkhād (nasēlkhād, ūdeshkhāl), I sew the pouch.

dā' nayfzi ishlē (ishla, adeshhl), I make a leather pouch.

(dā' nayfzi) bikēdfitsōsigi, the flap.

dā' nayfzi bilḍasā'ānigi, the pouch button.

dá' nay'zi bit'ól, the pouch strap.

dá' nay'zi bit'ól báhasníl, or yô níchín ághagházhazt'ígi, the silver buttons decorating the shoulder strap.

sís, the belt, also the silver disks.

beöldó' bizís, a holster, cartridge belt, gun case.

beölcífdídlo, a buckle.

sís dolyéli, or holyéli, a buckled (belt) strap.

yô níchín nōjfhigi, ornamental silver buttons of a smaller size, as seen on moccasins, holsters, pouches, and so on.

sís asht'ē'nbíshgyésh (asht'ē'nbíngízh, asht'ē'nbídesghísh), I cut a (long) strip for the belt.

sís qashgyésh (qálgízh, qádesghísh), I cut the belt out (of a strip of leather).

sís áshlé, I make a belt; sís náshkhád, I sew the belt.

beölcífdídlo bídahish'á (bídash'á', bídadesh'ál), or bádahish'á (bádash'á', bádadesh'ál), I adjust the buckle, put it on the belt.

beölcífdídlo bídishkhád (bídíkhád, bídídeskhál), I sew the buckle on.

akhászís (akhásíszás, akhádeshzís), I girth myself.

sízís ke'ish'ág (ke'í'á', kídesgh'ál), I ungirth myself.

nahidishlé (nahidí'á', nahidídesgh'ál), I buckle, fasten something.

náhizhdídle (náhidílyé), or anáhizhdídle, it is buckled, consequently sís dolyéli would mean the belt which buckles.

kétó', (which breaks the shot), a wrist-guard; kétó' qashgyésh, I cut a wrist-guard; kétó' áshlé, I make a wrist-guard.

kétó' bit'ól, the thongs for the wrist-guard.

yô níchín kétó', the silver plate of the wrist-guard.

PLATTING.

Horse hobbles are made of rawhide strips about two or three inches wide, and about two feet and a half long. A button knot is braided of the spliced rawhide on one end, while a slit is cut into the other end to receive the button. When still green, or moistened, six or seven twists are made with the rawhide, leaving a loop at either end to receive the foot of the horse. It is

then placed in the sun to dry, after which it will retain its shape unless too frequently exposed to rain. When desired, the hobble is untwisted, the center part is passed around the foot above the hoof, the twist refolded, and the two ends are buttoned around the other foot. This kind of hobble is very durable and may be conveniently strapped to the saddle.

Though it is now usually preferred to purchase quirts, or riding whips, and ropes at the various stores, many Navaho are skilled in plaiting these articles, and produce a very neat and durable fabric. A bone or hard wood awl is the only instrument used in plaiting. Formerly the quirt was made of a strip of rawhide, the center of which was wound around a stick, while the spliced ends, or the four strands, were platted to form a convenient rod. At the end of this, or near it, a hole was provided for the purpose of slipping a strip of rawhide through it, so that the quirt might be carried on the wrist. The plaiting done the quirt was dried in the sun, after which the stick was removed and a lash fastened in the loop, when the quirt was ready for use. At present black or tanned leather strips are used in plaiting, the larger and better made quirts requiring from eight to ten and sixteen strands. The interior is made up of a piece of twisted and sun-dried rawhide which, in addition, is often wound with cord or cloth to increase its size. Around this the leather strips are platted so as to conceal their ends and present a neat and smooth surface. The grip usually terminates in a plaited knot with a sling for carrying the quirt.

Occasionally, horsehair is substituted for leather in plaiting, and a very attractive quirt of alternating white, red and black horsehair is made for the market.

They also plait lariats, or horse ropes, of buckskin, using from three to eleven strands. Owing to the scarcity of buckskin, however, goatskin is often substituted. They are very durable, and wear well for ordinary purposes, though for lassoing the ordinary hemp rope is preferred as less expensive. Lariats are also plaited of horsehair, wool, and recently also of rawhide.

WORDS.

h behétlöl, the hobble; **h behétlöl ishlé**, I make a hobble.

h behétlöl aqānbīnshgyesh (**aqānbīnlgīzh**, **aqānbīdeshgīsh**), I cut the leather for a hobble.

h behétlöl yishjāsh (**nʔé**), I make a knot on the hobble.

h behetsʔ beēshtlō (**besétlōʔ**, **bedeshtlōl**), I hobble a horse.

h behétlöl bil danātʔāhi, the knot of the hobble.

beētsqīs, the whip, or quirt.

beētsqīs yishbīzh (**shébīzh**, **deshbīsh**), I make or plait a quirt.

yishbīzh is used for three or more strands, thus: **tqāgo yishbīzh**, **dīgo**, **ashdlāgo**, **hastqāgo yishbīzh**, etc., a plait of three, four, five, six, etc., strands.

nfyīzgo yishbīzh, a round plait, it is plaited round.

bīdazneskāgo yishbīzh, braided or plaited in a square, quadrangular plait.

daḳā, a square.

alkésgīz, twisted; **alkīsgīz** (**alkīselgīs**, **alkīdesgīs**), I twist a (single) strand; **alkéstqās**, twisted; **alkīstqās** (**alkīselstqās**, **alkīdestqās**), I twist (two strands).

aqīnlkhādāszīd, chain plait, used in making quadrangular quirts.

aqīnlkhādasīd (**aqīnlkhādasésīd**, **aqīnlkhādadesīl**), I draw both on it, because the ends are exchanged through the opening and drawn together like a saddler's stitch. The chain plait is meant.

yishjāsh (**nʔé**), I make a knot.

yishāsh (**shézhāsh**, **déshāsh**), I make a knot, plait a knot.

akji yishjāsh, it is knotted (the plait).

bīkīdesdlīzgo yishjāshi, a knot, which in addition is wrapped or wound with leather.

nāōshqtāḏ (**naisēltqāʔ**, **naʔideshtqāl**), I unravel, untie (a knot).

nāōshʔād (**naisāʔāʔ**, **naʔideshʔāl**), I untwist.

abāntlöl, a buckskin, or goatskin rope.

h bitsētlöl, a horsehair lariat (horsetail hair).

aghāsīs tlöl, a woolen rope.

aghāsīs tlöl yishbīzh, I braid a woolen rope.

abáni yishbfzh, I plait a buckskin rope; or, describing the process: tñzi khági yildzago do yilzago ádo nebestázdo, ndída yishbfzh, after removing the hair from the goatskin, tanning and cutting it in strips, it is plaited.

akhál, rawhide; akhál yilzhí, blackened rawhide, leather.

IMPLEMENTS OF WAR AND THE CHASE.

The spear consisted of a stout shaft, about seven to eight feet in length, to which a point of flint, and later of iron, was fastened and decorated with a tuft of eagle feathers.

tsídítqān (tsídítqā), the spear; tsídítqān bitsín, the spear shaft.

tsídítqā yistsíd (yítséd, destsíl), I pound the spear point.

tsídítqā yishkāsh (yíkāsh, deshkāsh), or tsídítqā babá yishkāsh, I whet the edges of the spear.

tsídítqā (babá) yishclísh (yíclísh, deshclísh), I rasp or roughen its edges with a stone or file.

tsídítqā qāhashkāsh (qahákāsh, qáhideshkāsh), I grind or whet its tip; tsídítqā qāhashclísh (qaháclísh, qáhideshclísh), I rasp the tip of the spear.

tsídítqā ashlé (ishlá, adeshlí), I make the spear (handle).

kís tsós, slender alder (for the handle).

átsé, the tail (made of atsa bitsé, eagle tail feathers), tuft of feathers decorating the spear.

tsídítqā be idishísh (nt'é), I prick (stick) with a spear.

tsídítqā be yistsí' (nt'é), I wound slightly (with spear).

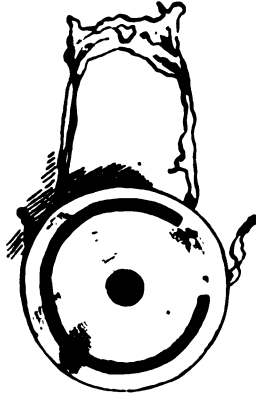
tsídítqā ná'ishgyéd (na'ílgýéd, naadeshgól), I pierce with spear.

tsídítqā naghánshgyéd (naghánlgýéd, naghádeshgól), I run you through (pierce) with a spear; tsídítqā qá'ishgyéd (qa'ílgýéd, qáadeshgól), I pierce him with the spear; tsídítqā nínástsi (nín-sétsi, níndestsi), I ram (thrust) you with the spear. The thrust was made downward and rarely from the side.

tsídítqā nāhanáshtqí (nāhanátqá', nāhadeshtqíl), I extract spear.

tsǐdítqá nahanádzís (nahanádzís, nahadesdzís), I jerk it out.
 dǐshǐsh (dǐshǐzh, dǐdǐshǐsh), I stick, thrust at.
 déǐlzhǐzh, spear wounds, or scars.

Some maintain that the shield was elliptical in shape, others know only the round shield shown in the accompanying cut, which was made of horsehide, and later of rawhide. This was burnt slightly, placed over an anthill and covered with a heavy layer of dirt to give it the desired shape, when it was placed in the sun to dry. The entire outer rim of the shield was decorated with eagle feathers, to preserve which many shields were provided with a crease in the center, so that they might quickly be opened and closed by stepping on them. In addition, the outer surface of the shield was richly emblazoned with figures relating to war, such as figures of the sun, half sun, rainbow, crescent, a bear's foot, and the Slayer of Enemies.



In action the shield served to guard against attacks from either side, for which purpose it was carried through a buckskin sling on the left arm, while again it could easily be brought to the front or rear by means of the buckskin band which was attached to the shield and passed over the right shoulder. With the introduction of modern firearms, however, few were found dextrous enough to constantly hold the shield at such angles at which a bullet should glance from it, so that both shield and spear became worthless. Shields may still be found among the family relics.

nágé (nagyé), (which is carried on the back), the shield.

atsá bitsé, eagle tail feathers.

nágé ishǐé, I make a shield; tsǐn bíl daashkhǐl, I tack it down with wooden pegs.

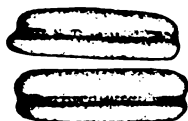
The bow, always carried in war, was made of oak, tsélkháni (a very hard wood), cedar, or sumac, and is now also made of black greasewood. The lower or inner side of the bow is flattened, while the other side is made smooth and slightly rounded at the edges. The stick is then heated over a fire, after which the foot is firmly planted on the center, and both ends of the stick are turned inwardly. Both ends of the stick are in turn pressed against the knee, so that when finished the stick has a slightly serpentine appearance. The extreme ends and the center, where the foot has been planted, are now wound with sinew of bighorn or deer (now also of goat, cow or other sinew) to the length of about three or four inches, to strengthen these points. Finally the whole is covered with pitch.

The bowstring of twisted bighorn or deer (goat, cow or other) sinew is securely wrapped about the end of the bow, while the loop at the opposite end of the bowstring may be easily slipped over the notch provided on the bow. When not in use the string is unslipped to release the tension. The bow is not decorated.

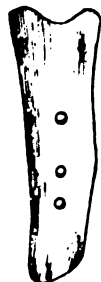
The shaft of the arrow is made of one or other species of hard wood like wild currant, black greasewood, *Findlera rupicola*, etc. Sticks of these are well cleaned of their bark, smoothly polished and straightened, which was done by pressing them between the teeth, or running them through narrowly grooved stones, or a punctured horn of the bighorn. A small notch to fit the bowstring is then made at one end of the shaft and a double zigzag line, with two intervening straight ones, representing zigzag and sheet lightning, are marked across its entire length. A triple fletching of eagle, hawk, crow or turkey feathers is then added and secured



with sinew. A narrow colored line of red and blue at the tip of the fletching completes the decoration of the shaft. The arrow-point of chipped white flint (besh ilgaf) or flint (bés'ěst'ūgi), and at present a piece of iron rubbed down to a triangular flat point, is set into the spliced end of the shaft and secured there with sinew.



Arrow Plane.



Arrow Plane.

Bow and arrow are still in use for small game and birds, and also in the game of arrow shooting. In practice, a blunt, pointless arrow is used, and at times a shaft made of reed and decorated in the above described manner may still be seen. Prairie dogs are frequently shot with a barbed arrow made by driving a nail, or piece of strong wire, just below the usual arrow-point. The barb prevents the animal from extricating itself, and facilitates extracting it from its burrow.

In dispatching the arrow, the bow is firmly grasped with the left hand, and after adjusting the arrow, is held vertically in front of the archer. With the index finger and thumb of the right hand holding the arrow in position, and resting the shaft on his left hand, the archer draws the string toward himself with the middle finger of the right hand. After sighting along the shaft of the arrow he releases it with a snap in the direction of the object. To protect the wrist against the cutting sting of the bowstring a guard, or small strip of leather, was worn around it. To-day, though it still serves this purpose, it is mostly ornamental, and is often decorated with a heavy silver plate with turquoise setting.

altqfn (altqf'), the bow; altqfn yistsél (yftsel, destsf), I make (chop) a bow; altqfn bitqél distsél (detsel, destsf), I give the bow a front (flat, inner side of bow).

bitqél dishé (deshē, desh), I shave (polish) the front.

altqfn ishlé, I (now) make the bow.

altqf' habó'ól'ēz, (where the foot has stepped), center of bow.
atáf d yisdz, I wind the sinew.

altqfn t'ól, the bowstring; altqfn bitqf'á' oshté' (bitqf'á' isélt'í',
bitqf'á' idesh'tí'), I attach the bowstring.

altqf bitqf'á' isélt'í', the bowstring stretched.

altqfn yishjé' (shéjē, deshjá'), I cover the bow with pitch.

kā', the arrow; kābēsh, the arrow-point.

besh ilgaf, white flint; besh, iron; bes'ēstōgi, flint, chipped
stone point, arrow-point; bésdōlāghās, serrated arrow-point.

kā' āshlé, I make an arrow.

tsākā' (tsikā'), the arrow-shaft.

tsākā' yishqfzh (vfyfzh, deshqfsh), I break (twigs) for the arrow-
shaft; yishtqf (yftqf' deshtqf), I break (twigs) off.

bakhāgi yishé (yishē', desh'), I shave bark off.

yisf' (yifz', desf'), I scrape, polish the twig.

askās (fkāz, adeskās), I straighten it.

bakāl, the notch.

bakāl ē'eshgyēsh (f'f'qfzh, ideshg'ish), I make (cut) the notch.

bik'inoj(igi), the lines on the shaft.

bik'ínshf' (bik'ínfzhí', bik'ínshí'), I mark it with lines.

bitáya ádaashlé (adashlá, ádādeshtí'), I color it.

ashtá' (aséltá', adeshtál), I add the fletching.

bibēzh ádaashlé, I attach the point.

kābēsh bik'idesdíz, the point is wound (with sinew).

altqínt'ól distsód, I stretch the bowstring.

adishtó' (nt'é), I shoot an arrow.

ajishtó' (adzíftó', azhdeshtó'), I shoot well, understand, often
shoot arrows.

adzisf (adzísí' azdesí'), I missed the mark.

nadishtó' (nadíshtó', nadideshtó'), I play arrow shooting.

bakásda, an arrow wound (also for spear and gun wounds).

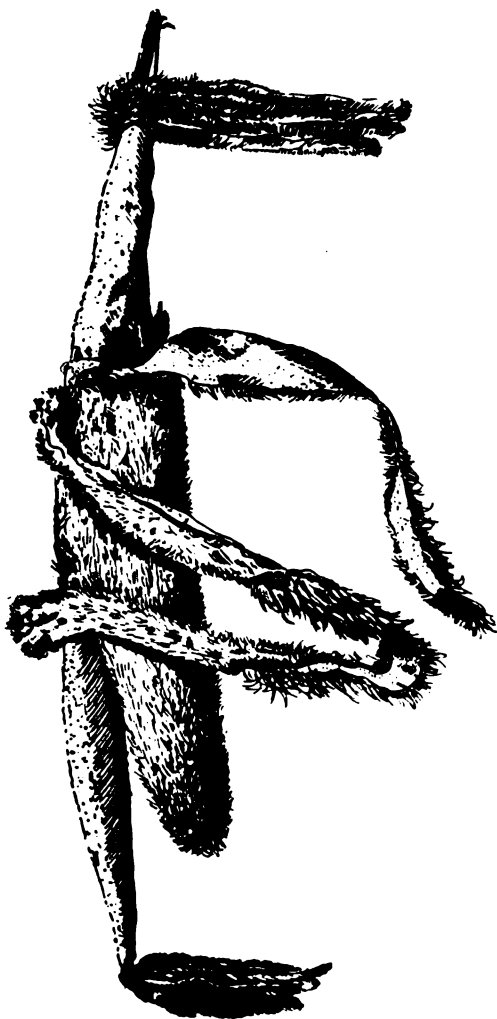
kākéi, one wounded by an arrow.

qákhāl, grazed (by a shot).

lókākā', a reed arrow.

kā' bečkāshi, arrow-shaft straightener.

Bows and arrows were carried in a quiver made of mountain lion or goatskin, and provided with two pouches to receive the arrows and bow. In time of peace it was girthed around the waist



and hung down the right side, while in war it was strapped to the back, over the right shoulder, so that the archer might conveniently reach back, and also protect himself with the shield

from attacks on the front. The quiver has not entirely disappeared, though most archers prefer to carry a few arrows and the bow in their hand, gathering each arrow after its discharge.

The stone ax was used at close range.

kāyél, the quiver; *kāyél āshlé*, I make, and *kāyél nāshkhād*, I sew the quiver.

kā'āzís, the pouch (in the quiver) for arrows.

altqízís, the pouch for the bow.

kāyél qashgyésh, I cut (the hide) for the quiver. Similarly, *kā'āzís* and *altqízís qashgyésh*, *āshlé*, *nāshkhād*, I cut, make and sew the leather for the pouches.

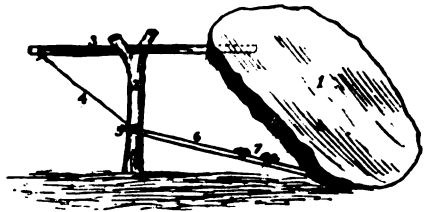
kāyél bakhászís (*bakhasíszás*, *bakhádeszís*), I girth myself with quiver (hanging down), but *kāyél yishgyé* (*yishgf'*, *yideshgél*), I carry the quiver (strapped to my back).

níl, or *tséníl*, stone ax.

GAME TRAPS.

The following trap was used in former days for four-footed game.

A forked post (2) is planted into the ground and a strong stick (3) placed in the fork. Against one end of this stick a stone slab (1) is leaned, while a rope is tied to the other end, which is wound several times around the forked post near the base. At the other end of the rope (4) there is a small stick (5) used as the trigger of the trap. Another stick (6) is placed from the base of the stone slab and braced against the small stick at the end of the rope. On this last named stick the bait (7) is attached. So soon as the animal disturbs the stick (6) the latter falls to the ground, releases the trigger (5), and unwinds the stick (3), so that the stone (1) falls and crushes the game.



Traps of this kind were used not only for larger game, but also for rabbits, mountain rats, or any other four-footed animals. At present they are rarely used.

beeljǫzhi, (that with which one smashes), a game trap.

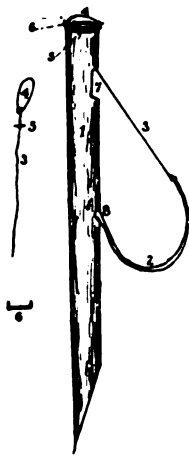
ashjǫzh (ashǫljǫzh, adeshjish), I smash.

yishjǫzh (shǫljǫzh, deshjish), I smash, crush it.

gǎ' yishjǫzh, I trap (crush) a rabbit.

SNARES FOR BIRDS.

The following snare is still used for catching birds. The stalk of a sunflower, about three to four feet long, is procured, the pith well taken out of the upper part, and the rim polished perfectly with a stone. A small hole (7) is cut in the stalk, about three inches below the rim, and another smaller hole (8), sixteen to eighteen inches below the rim. Into the smaller hole a twig of greasewood (2) of the thickness of the little finger is thrust. At the end of this twig is fastened a string made of two horsehairs and twisted (3), with a sliding loop (4) at the end. Just below the loop a very short stick (5) is tied with the horsehair string. Another small stick is cut by splitting a piece of reed (6), fitting it across the top rim of the stalk (1), and turning it up at both ends to keep the loop from falling over or being caught by the rim. All parts in contact with the snare must be polished perfectly smooth.



The stalk is stuck into the ground in or near a cornfield, or other place frequented by birds, the twig of greasewood is bent in a bow and the snare is passed through the upper hole across which the small piece of reed is laid. The very small stick below the snare is placed so that one end rests on the rim of the stalk and the other on the reed, while the snare is arranged about the rim of the stalk within the upturned end of the small piece

of reed. A bird alighting upon the stalk will disturb the arrangement; the small piece of reed, slipping from its place, will release the short stick on the snare; the twig of greasewood, in straightening out after the release, will pull the snare with the bird's foot into the hollow stock.

Usually a number of these traps, sometimes as many as ten or twelve, are set up in a place. Early in the morning or late in the afternoon is considered the best trapping time. Dung burnt at different spots on the place is thought to attract the birds.

tsfdi bewúdléhe (beodléhe), bird trap, snare.

tsfdi wushlé, or yishlé (yfló', yideshló), I trap (snare) birds.

ndiyfli, sunflower; H bitsé alkésdís, twisted horsehair; lúká, reed; ló, snare, loop; duwúzhilbal, greasewood.

BOOMERANG.

The boomerang is made of oak and whittled down to the shape of a battenstick, when it is heated and bent over the knee to give it a slight curve on the edged side. In hunting rabbits it is hurled after the animal, the object being to break its legs.

tsáqál, the boomerang, or tsáqál nalkí, sailing boomerang.

tsáqál ashlé, I make a boomerang.

tsáqál beējishqál (beēdzíqál, béēzhdeshqál), I hurl boomerang.

lēsh bitqázhdishqál (bitqázdzíqál, bitqázhdídeshqál), I skip it along the ground.

léjishqál (lēdzíqál, lēzhdeshqál), I strike the ground.

gá' naábijshqál (naábidzíqál, naábízhdeshqál), or gá' ndishqál (ndíqál, ndídeshqál), I strike a rabbit.

gá' bitqáqūishqál (bitqáquyélqál, bitqáqodiyeshqál), I strike it between (its legs).

SLINGS.

A toy gun is sometimes made by boys and used to shoot birds with stones, nails, small arrows, or bullets. It is made of a

grooved stick in the shape of a gun, with a small bow attached to its muzzle, and a string fastened at either end of the bow. In shooting, this bowstring is passed over a notch in a wooden trigger, with which the string is released, sending the missile forward at a good speed.

Boys also make rubber slings of a forked stick and a rubber band attached to a piece of leather for shooting birds.

Similarly, the slingshot, consisting of a diamond-shaped piece of leather to hold the stone, and two cords, one of which is released in swinging it, is also used in killing birds, or throwing at the sheep when herding.

altqí beédiltqáshi, (bow with which one taps it), toy gun.

biyíldzís, a groove.

bíídishké (bíídeké, bíídeshké), I cut a groove into it.

élgísh, it is cut out, or altqíntíól bá'algízh, the notch for the bowstring.

benaháltqáhigi, the release, trigger.

beéjíshtqásh (beéjíshtqázh, beézhdeshtqásh), I shoot with it.

beédishtqásh (nt'é), I shoot frequently.

naatsódi, (the stretcher), rubber sling.

beditíhi, slingshot.

adishtí (nt'é), I throw the slingshot.

ajishtíín (adzítíín, azhdeshtíí), I throw (put) the slingshot.

THE GUN.

The modern gun has largely displaced the native weapons and few Navaho are without a sixshooter or rifle. Shotguns are not much in use.

A powderhorn was made of the horn of a goat or cow and the opening covered with goatskin. These are no longer in use.

Words have been coined for the various parts of the gun.



beəldó, a gun, rifle.

beəldó yázhě, a sixshooter.

beəldó nnézigí, a rifle.

beəldó nnézigí bidáznes-
kánigi, the barrel of a rifle.

beəldó bizól, the magazine
of a rifle.

bikéhedíltóhi, front sight.

bikéhedíltóhi dēg hótáligi,
rear sight.

beəldó bijá', the hammer.

beəldó beəltqfntól, trigger.

beəldó bitsín, gun stock.

beəldó bitlá, the arm rest
(curve in the stock).

beəldó baká', the cartridge.

beəldó baká' beəqínfligi,
the ejector (lever).

beəldó baká' aqínfli gúně',
the breech of a gun.

The ejector is also called
beəldó baká' qaha'nfli dé.

The breech block, beəldó
baká' iyínfli qá'ínfligi, which
extracts the cartridge put into
the barrel.

besh lichfi desdón, a brass
shell, empty cartridge, which
is also called besh lichfi bitsá',
the pocket of the shell.

beəldó baká', a loaded shell,
or simply do-desdóda, not fired.

beəldó bínátsí, a ramrod.

besh lichfi neinktqáshigi, the
percussion cap.

baká' bīhish'á (bīhf'á, bī-
desh'á), I load a gun, I put a
cartridge into the gun.

bīhinásh'á (bīhaná'á, bīhā-
desh'á), I unload, or take the
cartridge out of the barrel.

nnshgyēsh (nnfgízh, údesh-
gísh), I cock a gun.

beəldó danákqēd yitsá', the
click of a gun.

nná'nshgyēsh (nná'nfgízh,
nná'deshgísh), I leave the trig-
ger down.

āqishtqād (aqíltqā, aqidesh-
tqā), I pull the trigger (on
empty gun).

dishdón (dēldón, dīdeshdól),
I shoot, pull the trigger on
cartridge.

beəldó baká' dīslīnīgi, car-
tridge forty caliber.

beəldó yishtód (yíftód, desh-
tól), I wipe or clean a gun.

beəldó bīqāāsh'tód (bīqā'f-
tód, bīqādeshtól), I clean it
out (inside).

bīqāāsdīs (bīqā'fldíz, bīqā-
desdīs), I clean a gun (with a
rod).

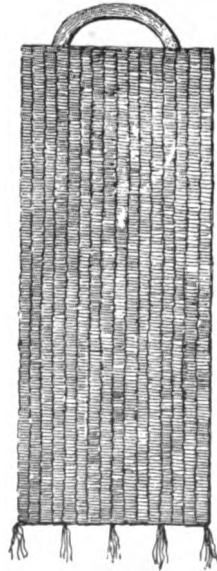
beəldó bínáāstsí (bīnā'sétsí,
bī'údestsí), I ram (clean) a gun.

NAVAHO HOUSES.

The primitive dwelling of the Navaho is described as a mere dug-out, with a rude covering of a grass and yucca mat secured with yucca cords. This was entered by means of a ladder, which was drawn inside after use. When a change of domicile was made both the ladder and grass roof were taken along, the latter being rolled together in a convenient bundle and carried by a handle provided for this purpose.



With the growth of the tribe this primitive dwelling was entirely abandoned and the present types of the hogan, modeled after legendary patterns, were adopted. These are miserable, uncomely structures, in striking contrast with the high sense of harmony and beauty exhibited by the Navaho in his beautiful blanket and attractive silverwork. Presumably, this is due partly to the nomadic life of the Navaho, a trait which has undoubtedly had some influence upon his art as well as his dwelling. He has neglected, for instance, the art of pottery making as cumbersome, whereas it appeals strongly to the more sedentary Pueblo, and has carried the art of weaving to a remarkable degree of perfection, inasmuch as it is not impaired by an occasional change of domicile. Thus, too, the Navaho house has every mark of a temporary and valueless structure, which is easily and quickly constructed, while affording just sufficient protection against the vehemence and severity of the weather. At a very recent date, however, the old type of dwelling is being partly displaced by a more commodious log or stone structure of the flat roof type. While these are fur-



nished with chairs, tables, and other modern furniture, the Navaho hogan dispenses with these luxuries, and is ready for occupation immediately after its completion.

The Navaho house is devoid of any decoration. Still, in the description of the legendary prototypes of the various hogans, the Navaho selects all that is gorgeous, splendent and precious in nature for their construction. The poles of the conical hogan, for instance, were made of precious stones, such as white shell, turquoise, abalone, obsidian (cannel-coal), and red stone, and were five in number. The interstices were lined with four shelves of white shell, and four of turquoise, and four of abalone and obsidian, each corresponding with the pole of the respective stone, thus combining the cardinal colors of white, blue, yellow and black into one gorgeous edifice. The floor, too, of this structure was laid with a fourfold rug of obsidian, abalone, turquoise and white shell, each spread over the other in the order mentioned, while the door consisted of a quadruple curtain of dawn, sky-blue, evening twilight and darkness. As a matter of course the divine builders might increase its size at will, and reduce it to a minimum, whenever it seemed desirable to do so.

Similar prototypes are mentioned for the other patterns in vogue to-day, as also for some others whose distinctive features are now added to the ordinary hogan in the course of various ceremonies. And since these details can not be supplied upon the modern stone or log structure, the ceremonies are ordinarily conducted in a distinctively Navaho hogan, which is built in addition to the modern structure. It is quite conceivable then, that originally the rubric required an especial hogan for every ceremony, though at present it is restricted to the so-called *medicine lodge*, sometimes in use at the night and other chants.

Custom does not seem to require a special dedicatory ceremony for the hogan, whether it be for daily or ceremonial use. It is indeed good religion to sprinkle the cardinal posts with meal or pollen, yet this may be done by anyone, or rather, it is the duty of the head of the family to do so, and the hogan is

then ready for occupation without further ado. The case of the *medicine lodge* forms no exception to this rule, since the sprinkling of meal is performed before the entrance of the singer into the lodge. In addition, there are other rites which may be interpreted as dedicatory for a special occasion. Thus, the insertion of twigs of wild cherry, oak or sumac, and of the *pokers* above the logs at the cardinal points, are evidently in the nature of a dedication preceding a ceremony. And the house songs (*hoghán biyfn*), which by some authors have been mentioned in support of a custom of house dedication, are only incidentally such, and are essential to the vigil (*do-igházh*) or rite of blessing (*hozhôji*). This ceremony is performed frequently, and in one and the same hogan, to renew the blessing upon the members of the family and all their possessions, and since some twelve invocations (songs) are made upon the hogan on this occasion, they are referred to as house songs. Moreover, it is in accordance with good custom to have other ceremonies performed in a new hogan previous to the invocation of the house songs. In fact, this custom suggests that at times the new hogan is built for the purpose of having a desirable ceremony performed. For, while greater convenience makes a summer and winter home desirable at different points, and such natural causes as scarcity of range and water frequently decide in changing a location, this change is at times due to an evil spell which may haunt a vicinity. Should this continue despite all efforts to dispel such influence, a new dwelling is erected in some other locality, and its occupation inaugurated with some effective and purifying ceremony. Similarly, too, the hogan, which has been occupied by a deceased person, is instantly vacated and destroyed, and a new one erected in a different locality.

There are two distinct classes of residences, the summer and winter residence. The summer home is situate near the farm, while the winter residence is located at some point which offers facilities for fuel as well as range for the herds. More care, too, is expended upon the dwelling for winter, which is in

tally across the two eastern timbers. The space between is covered with small sticks laid horizontally across two additional supports, or parallel from lintel to cross-stick. This forms the roof of the doorway, which projects slightly from the sloping sides of the hogan, much like a dormer window. The space between the doorposts and the inclining eastern poles, too, is filled with small timbers. The space, however, between the apex and the upper crosspiece of the doorway is left uncovered, and forms the smoke-hole, which frequently is reenforced at the lower end by a rude cribwork of ordinary sticks of wood to insure proper draught.

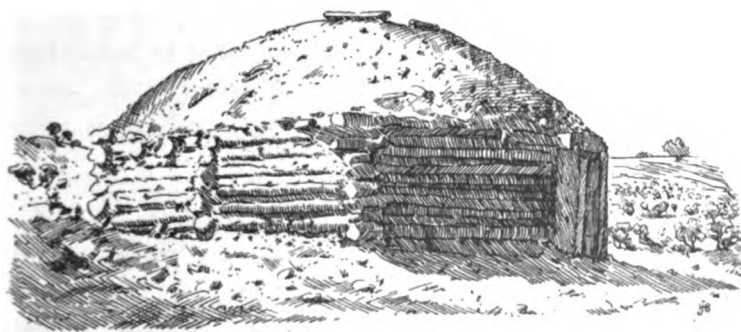
The crevices which appear between the small upright timbers are now filled with narrow strips or sticks of wood, and the whole covered with a layer of cedar bark. Starting then at the base, the whole is walled up with a generous layer of ground or mud to insure a water- and wind-proof structure. A curtain made of an old blanket is fastened to one of the posts for a door, which in cases of severe storms is doubled by an additional blanket attached to the sloping poles inside. The entry into, and exit from, the hogan is, of course, made in a stooped position owing to the small doorway. The hogan is now ready for occupancy. Many observe the custom of sprinkling cornmeal upon the posts at the cardinal points, or comply with it subsequently when it has been forgotten. A short invocation, such as *hozhó doléł*, or *hozhó áłł*, may it be well or blessed, accompanies the sprinkling of the meal. This also applies to the other types of the hogan.

The round hogan. Another type much in demand is called *yá'dahaskháni*, under the round (roof), and is preferred when a spacious dwelling is desirable, or if long timbers are not available. Four forked timbers are firmly set into the ground forming a square. Heavy cross timbers resting in the forks north and south support two additional ones stretched east and west, the whole being the skeleton or framework (*sá'di*) of the

structure. The sides are walled up with smaller timbers set slightly slanting in the ground, and close together, with their tips resting on the cross timbers. The doorway structure projects in the same manner as with the preceding hogan, with the roof resting on the cross timber toward the east side. The roof proper is constructed of terraces of small timbers converging into an opening at the center, which serves as a smoke-hole. Thereupon the roof and sides are covered with cedar bark and dirt as with the preceding hogan.

This type of hogan is selected for the night chant whenever the ordinary hogan is considered too small for the paintings and other requisites of this chant. The specially built hogan is then designated as *hatqál biniyé' hoghán*, or the hogan for a ceremony (ceremonial hogan). And while some do not hesitate to occupy it after the close of a ceremony, others object to its use on religious grounds, for which reason, and owing to its dimensions, many ceremonial hogans remain unoccupied.

tsfnditfin, walled logs, designates the heptagonal or octagonal structures which are occasionally built in mountainous and other



districts where timber is available. The logs are slightly hewn down at the angles where they cross each other, to obtain a firm lock. Several layers are built on top of each other to a height of from five to six feet, and support a roof of the same

type as in the preceding hogan. At the entrance piles are driven into the ground on each side of the wall of timbers to hold these in position. A crosspiece over the outer of the two posts finishes the framework of the door. The crevices between the timbers are closed with small sticks of wood and mud-plaster, while the roof is finished as in the preceding type. This hogan is the most spacious of Navaho types since it is devoid of all uprights inside, though at present many add this feature.

The square loghouse is comparatively modern, and is designated as *tsfn beekhîn*, house of logs. The timbers are always trimmed, and at times hewn square, so as to make a snug fit requiring very little plaster at the joints.

At a recent date houses of stone, of a single story and flat roof, are much in favor, and are designated as *tse beekhîn*, house of stone. They are built by Navaho masons of native rock and mud mortar.

Shelters, called *chahă'ô*, shades, are constructed during the warm season for the sake of convenience and shade. Four posts,



usually forked, are set into the ground with crosspieces stretched from post to post. This framework is sometimes limited to two, and even one forked post, to receive the ends of cross-

pieces, which rest in the branches of a tree or on the ground. The top and sides are covered with boughs of cedar or piñon, stalks of reed, or dry grass, or a blanket. A rapidly constructed hogan or shelter (hoghán shichfidi) sometimes consists of a rude framework of small timbers set up after the fashion of a conical hogan, and covered with boughs of piñon and pine bark. In the rainy season a rude framework supports a layer of branches, or stalks of reed, against which the soft mud taken from the surface is shoveled from the base up. When dry the hard plaster affords sufficient protection against the sun and the light showers of midsummer. Shade is at times obtained by planting cedar or piñon boughs in a circle, without any covering or roof, and with only a blanket secured at the entrance (il bechaha'ó). In journeying, herding sheep, or freighting, a wind-break or corral of cedar boughs, erected on some sheltered hillside, or below a shady tree, often serves as a temporary abode (ilnáztí'). The permanent corral (anáztí') is usually constructed of posts set side by side in a circle near the hogan, and is used for protecting the herds at night. Stables for the horses or cattle are not built.

The enclosure for public dances is erected after sundown, and is constructed of cedar and piñon boughs, with one entrance in the east. It is therefor called ilnáztí', circle of branches, or ilnáshjín, dark circle of branches.

WORDS REFERRING TO THE HOUSE.

kheqaf, winter place or residence.

kheshf', summer place or residence.

hoghán, the hogan.

khín, the house.

lēhogyédgo hoghán, the dugout of early days.

lēhogyéd, a modern cellar.

álchíf' des'af, interlocked points, the conical hogan.

yá'dahaskhání, (which is hollowed below), round hogan, which is also called hoghán bijád hulóni, the hogan with supports.

tsíndítłín (tsídítłín), walled logs, the heptagonal hogan.

tsebígo dá'áditłín, (eight walls), or tsebígo aqá'déníl, (eight put together), the octagonal hogan.

tsébékhín, house of stone, stone house, also called tsé' nástłingo behoghán, the hogan of walled stone.

tsín békhn, loghouse.

hatqál biniyé' hoghán, ceremonial hogan.

cháhá'ó, shade, shelter, summer hogan; also used for veranda or porch of an American house.

łehogyédgo cháhá'ó, dugout shelter.

hoghán shichídi, stacked hogan, dirt roof shelter.

łł becháhá'ó, the shelter of boughs.

yá'dahaskhánigo cháhá'ó, a round roof shelter (supported by four posts); also cháhá'ó nakhi bijádi, two upright shelter, and cháhá'ó dahaf bijádi, with but one upright. These are also called cháhá'ó shichídi, stacked shelter, which usually have a roof of branches or grass.

akásht'osh behoghán, bark covered hogan (for summer).

łesh aqídítłín hoghán, the hogan walled with dirt or mud-plaster.

łluáztł', circle of branches, a wind-break or corral of branches.

hoghán ashłé (ishłá, adesh-łł), I build a hogan, I make a hogan; ashłé, I make, is also used with the various types, thus: alchł' des'af ashłé, I am making a conical hogan, or cháhá'ó ashłé, etc., I am building a shelter.

hatqál biniyé' hasbf', or hatqál bahasbf', a hogan built for a ceremony.

hatqál biniyé hashbf' (qosél-bf', qodéshbıl), or hatqál báhashbf' (bahoséłbf', bahodeshbıl), I trim for the ceremony, I build a ceremonial lodge.

yáhatso, large inside, a spacious hogan (for ceremony).

tsín kfnshné' (kfnné', kfdeshnıl), I fell a tree.

báhasht'osh (bakásht'osh), or bakhági béshné' (béné', bfdeshnıl), I remove the bark, trim a log.

tsín aqáshkhál (aqálkhál, aqádeskhál), I split a log.

tsín áqidishkhál (aqidılkhál, aqídideskhál), I chop a log in two.

báhasht'ōsh bétsēl (bētsēl, b'fdestsīl), I trim, chop the bark, or báhasht'ōsh bēshdlād (bēldlād, b'fdeshdlāl), or báhash-t'ōsh bes'ōz (bēz'ōz, b'fdes'ōs), I trim (tear) the bark.

tsīn néheshkhāl (nehēlkhāl, nihideshkhāl), I split in strips.

tsīn aqáshné' (aqáshné', aqá-deshnīl), I chop a piece from a log.

tsīn aqádashné' (aqádashné', aqádashnīl), I hew pieces from a log.

tsīn nebeshné' (nehēlné', nshideshnīl), I cut strips or sticks of wood.

tsīn yishqēl (nfyf, deshqēl), I transport logs (on my back or in wagon).

chīzh (tsīn) nshqé (nnfyf, ndeshqēl), I pack wood or small sticks (for fuel).

tsīn (chīzh) yishjīl t'fōl be (f'ljīd, deshjīl), I pack logs (or fuel) on my back (with a cord or blanket).

b'fnes'hā (b'fnef'ād, b'f'fnes'h-āī), I make a mark, take measure.

nikh'fdistse (nikh'fdistse, ni-kh'f'fdestsī), I place on the ground for a mark, I mark off.

alchīf' adistsé (alchīf' adétsī, alchīf' idétsī), I lock the forks.

tsīn báqahashgyēd (baqahó-gyēd, báqahodeshgūl), I dig out for the timbers.

tsīn nábidiyishlā (nábidiyi-sá', nábidideshlā), I raise the poles.

tsīn asht'é nnshtqf (asht'é n'ntqā, asht'é ndeshqtqf), I place the poles in position.

hoghán bijād ádaastsī (ada-sétsī, ádadestsī), I set the posts (for the round hogan).

tsīn náda'dashtqf (náda'da-sétqā, náda'dadeshtqf), I lay the timbers horizontally.

tsīn nágo yishtfīn (nágo sétfīn, nágo deshtfīn), I wall horizontally, I put the roof on.

tsīn dá'dishtfīn (dā'dfīfīn, dá'deshmfīn), I wall up with timbers (for the walled log-house).

sá'di, (which is raised), the skeleton or framework of the hogan.

sá'di halgfīshi, the forked timbers for the hogan.

tsīn halgfīshi, a forked pole.

Individually, the timbers of the conical hogan are sometimes designated as:

shadā'ádæ na'ái, the pole from the south.

náhokhōsdæ na'ái, northern.

hoghán bēhúis'níl, the hogan covered with dirt.

əhúis'níl, covering of dirt (on the hogan).

hoghán daashdlísh, or da'íshdlíh (dashédlísh, dá'deshdlísh), or akán (meal), tqádídn (pollen) bedaashdlísh, or beda'íshdlísh, I sprinkle the hogan with pollen.

Certain parts and spots of the hogan are sometimes especially designated:

chíláyí', the smoke-hole.

chíéetqín, the exit or door.

dadínábál, curtain or door.

nākátái dasábáligi, a cloth curtain for the door.

dándólkhal, a (noisy) door (on modern houses).

hoghán bīnahasgyédi, excavated floor area of the hogan.

lēshtqá', ground or floor.

hoghán bitqátá', crevice or recess in the hogan.

nástlá'ji, in a nook or angle, (at the base of a timber, or the space between the uprights and the wall of the hogan). Thus, jish binástlá', or banástlá', the recess or space reserved for masks at the night chant, in the western angle of the hogan.

huntá' ádas'áhigi, twigs inserted in the crevices of the hogan at the cardinal points.

khónfkä' (khûnfkë'), the hearth or fireplace.

bikfji i'nolkhäd, is sometimes used for the pole in the west of the hogan.

ntsítlá', at the base of the western pole.

yúníd, between the fireplace and the pole in the west.

hunábá', around the fire, the space around the fireplace.

hunshqá', designates the east, south and north of the fire.

yá'alni, the space between yúníd and the fireplace, just west of the fireplace.

bahástlá', at the base of the door posts or timbers.

yúnö', inside the hogan.

tíódi, outside the hogan.

hoghán binédi, behind the hogan (west).

bakháde, or hoghán bakhá, on top of the hogan.

hoghán chöhunshó (chöhuñshö', chöhodéshö), I sweep the hogan.

bináhojítqál, a ceremony is going on in the hogan.

hoghán tqanáóshnıl (tqaisénıl, tqaidesh'nıl), I tear the hogan down.

hoghán bihodishnîl (bîho-dîñîl, bihodîdeshnîl), or hoghán dishîlîd (dîlîd, dîdeshîlî), I burn the hogan.

hoghán nâ'ishîlê (nâ'îlô', nâ'-âdeshîlô'), I pull the hogan down with a rope.

hoghán nâ'nshkhâd (nâ'anîl-khâd, nâ'adîfeshkhâî), I pull the hogan apart (by spreading the poles out).

hoghâ' ânshkhâd (anîlkhâd, adîfeshkhâî), I destroy the hogan (by throwing the poles in a heap).

hoghán (hoghâ') anîlkhâd, a fallen hogan (which is in a heap).

hoghán nâ'anîlkhâd, a destroyed hogan (fallen sideways).

hoghán nîlîdâs, hogan which fell in.

hōkē'ghán, a deserted hogan (owing to death). This is also used for the site on which the ruins of a burnt hogan are visible.

nîya'kêd, vacated ruins.

THE SUDATORY.

From the preceding account of the hogan and its meager furnishing the inference seems justified that the Navaho is indifferent to bodily cleanliness. Indeed, a modest few make it a point to wash themselves in the morning, and procure such modern articles as soap, basin and towel for the purpose. It is also well known that occasionally, say once or twice a week, the head and hair are thoroughly bathed with yucca suds. The saponaceous roots of this plant are dug out, crushed to a rough fiber, and well shaken in a basin or bowl of water, producing a very rich lather. This, and the plant itself, are therefor called tqálawhûsh, soap. When the hair has been well soaked, and the lather worked down to the skin, the surplus water is thoroughly wrung out by twisting the hair with the hands. The bather then throws the hair backward and exposes them to the sun to dry, after which they are brushed with a whisk broom and done up in the usual fashion.

Not a few keep the hogan neat and clean, removing all surplus

sand with a broom made of a bunch of mountain grass, and burning and throwing the offal to the dogs. Pelts and blankets used for bedding are occasionally spread out on a tree for airing, though frequently they are rolled up in the morning and put aside without further ado. Accordingly, old pelts, which have become infested with vermin and lice, are disposed of at the stores. Shirts and pants, skirts and jackets, are worn by men and women, respectively, until they become useless, and another outfit is made by each individual. Clothes are not washed as a



Native Broom.

rule, but discarded when too filthy, and the wardrobe ordinarily consists of what apparel one has on his person, with an additional coat and pants, jacket and skirt, for festive occasions.

Yet, withal, the Navaho uses the sudatory with greater frequency than such indifference to bodily cleanliness might warrant, and thoroughly enjoys the luxurious pleasures of this primitive bath, some frequenting it as often as two or three times a week.

The sweat-house or sudatory is the conical hogan in miniature, with the doorway structure omitted. The entrance to it is variously placed, but most frequently it faces westward. A number of stones, thoroughly heated over a fire, are rolled into the hut and placed on the north side, owing to the belief that colds and cough originate in the north, so that the heated stones, placed between the bathers and the north, obstruct their passage. The bathers strip to the breechcloth (women to the *tłákhál*, or loincloth) and enter, or rather crawl, into the hut. Though its dimensions are frequently from four to five feet in diameter, and less in height, it is not unusual that from ten to sixteen bathers enter the hut at one time, as a large number of bathers

is conducive to rapid perspiration. To obtain this object water is at times sprinkled upon the stones after the entrance has been closed with a blanket by the last of the bathers. They remain in this confinement as long as twenty minutes, and on leaving it roll themselves in the sand to remove the scales of surplus skin. Many reenter and repeat the same process several times. In the vicinity of streams the bathers finally plunge into the water, otherwise they don their old clothes and return home leaving the hut undisturbed for future use. The effect of the sweat-bath is one of momentary drowsiness, which is soon followed by one of



renewed vigor and refreshment. Accordingly, it is used both in summer and winter, and always at daytime, while in time of war, and at present in exceptional cases, it is frequented at night. Women, too, enjoy this bath, but always alone, and not as frequently as the men.

In accord with legendary accounts, the sudatory often figures in the course of various ceremonies. Thus, in the night chant, a sudatory is erected at each of the cardinal points. On four consecutive days the patient submits to the sweat-bath in one of these, starting with the sudatory in the east, and completing the circle in the north by way of the south and west, while the

singer decorates it with a figure representing the rainbow, and made of vari-colored sands. In the chant called *diné' bínłchíji*, or wind chant, the order is reversed, and the drawing is made inside the hogan, while the patient is confined in the sudatory. However, these sudatories, in deference to legendary prototypes, consist only of the framework or poles, which are covered with pelts and blankets to receive the drawings, in lieu of the ordinary covering of dirt. When the drawing of the rainbow has been completed the patient is released. Such afflictions as colds, fever, stiffness and inertia are said to be dispelled by the (ceremonial) bath.

WORDS.

tqáchē, or *tqáchē baghán*, the sudatory.

tqáchē ishlē, I built a sweat-house. This is also expressed by *tqáchē ndinshjē* (*ndínłjē*, *ndídesjhá'*), I build the fire for the sweat-bath, hence, *tqáchē ndínłjē*, the sweat-house is ready.

tqáchē dí'ásh, let us take a sweat-bath.

tsé' fníl, it is ready.

tsé' ishníl (*tsé'fníl*, *adesh-níl*), I place the stones inside.

tqáchē yishá (*yíyá*, *deshál*), I am entering the sweat-house.

tqáchē yí'ásh, or *yijé*, we will enter together.

tqáchē shijé, we were in the sweat-house.

tqáchē sétqí, I am in the sudatory.

tsé' yanástse (*yanátsí*, *yéídestsí*), I put the stones on a heap (for fire).

tsénishgá (*tsénilgaí*, *tsé' díneshgá'*), I heat stones.

tsé' nígai, heated stones.

tqáchē yish'ná' (*yísh'ná'*, *desh'ná'*), I enter (crawl into) the sudatory.

tqáchē sédá, I am (sitting) in the sudatory.

tqō sháhatqél (*sháhátqél*, *sháhahadotqíl*), I am perspiring.

hatqásil sélf (*hazíf*, *hodolél*), I perspire freely.

tqáchē qanáshda (*qanádsá*, *qadeshdá*), I leave the sudatory.

łesh ádánanshde (*ádánanáshdē*, *ádándfneshda*), I rub dirt over my body.

lēsh bīnāsh'nā' (bīśś'nā', bīdēsh'nā'), I roll in the dirt.

lēsh adēshjī' (adishīshjā, adīdeshjī), I sprinkle dirt over myself.

(tqāchēdæ) tsé' chāenshnīl (chāensh'nīl, chāedesh'nīl), I remove the stones from the sudatory.

tsēnīzīl tqō bīkēshkhā' (bīkīśākhā', bīkīdeshkhāī), I sprinkle water on the stones (with a cup or vessel) for steam, or tqō bīkēshkhād (bīkīśēlkhād, bīkīdeshkhāī), I sprinkle it with my hand.

tqāchē tqanāōsh'nīl (tqaisīś'nīl, tqāīdesh'nīl), I tear down the sudatory.

tqō benāsh'nā' (besīś'nā', bedesh'nā'), I plunge into the water.

tqō benāsmās (besāmāz, bēdesmās), I roll in the water.

tqō akēheshkhā' (akēhēshkhā', akīhideshkhāī), I sprinkle myself with water (with a vessel), or tqō akēheshkhād (akēhēshkhād, akīhideshkhāī), I sprinkle water on myself with my hands.

tqāensdzīd (tqāēnsdzīd, tqāēdfnesdzīl), I plunge (dive) into the water.

tqāītīā' yishyēd (tqāītīā' yishwhūd, deshwhūl), I dive (run) into the water.

nashbē (nśēbī', ndeshbēl), or nā'āshkhō' (nāsēlkhō', ndeshkhōl), I swim.

do-nā'āshkhō'da, I can not swim.

tqāītīā' yishgē (tqāītīā' yīgō', tqāītīā' deshgō'), and tqāhishgyē (tqāhīgō', tqāēdeshgō'), and tqāhishītlīsh (tqāhītlīzh, tqāēdeshtīsh), or tqāītīā' yishītlīsh (yītlīzh, deshtīsh), I plunge (fall) into the water.

nash'ēl (nśē'ēl, ndesh'ōl), or dā'nash'ēl (dā'nśē'ēl, dā'ndesh'ōl), or dā'nā'āshkhō' (dā'nśēlkhō', dā'ndeshkhōl), I swim (float).

qadishjā (qādīshjā, qādīdeshjī), I strip, undress.

qadish'nē (qādīsdzā, qadīdesh'nīl), I dress again.

adēnā'ishtīn (adēnā'iyēshītlīn, adēnā'diyeshītlīl), I put my clothes on again.

shikhē bī'nāstēs (bī'nāstēs, bī'ndēstēs), I put my moccasins on. Similarly, sīstlē, (leggings), shītlājīś, (my pants) bī'nāstēs.

ādīnshkē' (adīnēshkē', adīdfneshkēl), or nāneskās (nānīkās, ndfneskās), I cool off.

shi æ bī'nāshdā' (bīnāsdzā, bī'ndeshdā'), I put my shirt or coat on; also chalékho, (vest), shi ætso, (overcoat or coat) bī'nāshdā'.

natšlīd bēikhā, sand-painting of the rainbow.

sitsf tqanāsgīs (tqasēgīs, tqādesgīs), I bathe my hair.

tqāláwhūsh, lather, soap.

tqāláwhūsh tqayishkhā' (tqayíkhā', tqadeshkhā'), I make the lather.

tqāláwhūsh tqāōsh'nī' (tqaisēnī', tqaidēshnī'), I stir the lather.

tqāláwhūsh hānshtqā (hāné-tqā, hādīneshtqā'), I hunt roots (amole).

tqāláwhūsh hashgyēd (hāgyēd, hādeshgōl), I dig out soap (root).

tqāláwhūsh qashtqí (hatqā', hādeshhtqí), I take the root out.

tqāláwhūsh yistsf (yítsēd, destsf), I pound the roots.

sitsf náltsa (náltsaí, ndoltsf), I dry my hair.

sitsf tqóbáyishqād (báyí-ghād, bādeshqā'), I shake water out of my hair.

sitsf tqóbáyishnī' (bāsēnī', bādeshnī'), I wring my hair out.

sitsf bešhtlō (besētlō', bedēshhtlō), I tie my hair.

sitsf yishó (yíshō, désho), I brush, comb my hair.

sitsf kibídesho (kibíshēshō kibídésho), I brush my hair.

sitsf, or tsíghā yishé (yíshē', deshí), I cut my hair.

tsíghā dishlīd (dīlīd, dīdēshlī), I burn the hair.

tsíghā nashbēzh (nšé', the hair are scattered. The Navaho burn the hair after cutting, so that they may not be scattered to the winds.

tsíghā ndéztqād (nšé', scattered hair.

tsíghā nāzhjōl (nšé'). tufts of hair lying here and there.

tsíghā nikhídel'á' (nšé'), the hair is scattered.

tsíghā nikhídlíntqād (nšé'), the hair is scattered in every direction.

RELIGION.

The elaborate system of religious worship among the Navaho lets them appear as a very religious people. Their anthropomorphous deities are numerous and strikingly democratic, each excelling in his peculiar sphere of independent activity and power. They are described as kind, hospitable and industrious; on the other hand as fraudulent, treacherous, unmerciful, and, in general, subject to passions and human weaknesses. Their lives, to a great extent, are reflected in the social condition of the Navaho as, for instance, in the subordination to local headmen, in the manner of farming, hunting, ceremony, etc., all of which find an explanation in previous occurrences in the lives of the holy ones. This is especially true of the ceremonies or chants, most of which have been established by the *diyñi*, or Holy ones, for removing evil.

The existence of evil is attributed to the wrath of the *dinǣ'ě'*, or Peoples, such as the Animals, Winds, Lightnings, etc. Much evil, disease and bodily injury is due also to secret agents of evil, in consequence of which the belief in witchcraft, spells, dreams and *shooting of evil* is widely spread. Accordingly, too, of the two forms of worship, one against evil (*hochōji*), the other for blessing (*hozhōji*), the former is presumably in greater demand, but is subordinate to, and always accompanied by, the latter.

The idea of a creator of all things is unknown to the Navaho, as also that of heaven or hell. The belief in a life hereafter exists, however, and is a life of happiness with the peoples of the lower worlds among whom the deceased are numbered. The deceased, in turn, may injure the living.

The average Navaho is loath to study the intricate fabric of his religion and knows little of it beyond ceremonial performance. The singer or shaman, usually a man of excellent memory, is entrusted with whatever pertains to subjects of worship, though probably no single one is versed in all of its branches. Moreover, the knowledge of the legend which attaches to every chant is not a material requisite for properly conducting a ceremony, though the legend furnishes the clue for corrections.

The following synopsis, taken from unpublished legends in our possession, presents the most salient features of Navaho worship, together with other subjects of a religious character.

THE LOWER WORLDS.

The legends speak of twelve lower worlds, the home of various Peoples (*dinǣ'ě*). These worlds were small in size, and are referred to as chambers (*dahunǣkhǣ'*), which are numbered as the people pass through and stand on the several vaults. Their *speech* in the several worlds, too, is recorded; hence, the roof or vault of the first world is called *sǎd ǎǎl*, the first speech; the vault of the second, *sǎd nakhǣ*, the second speech; similarly, *sǎd tqǎ*, *sǎd dǐ*, *sǎd ashdlǎ'*, *sǎd hastqǎ'*, *sǎd tsǔstǣd*, *sǎd tsǣbf*, *sǎd naǣstǎf*, *sǎd neznǎ*, *sǎd ǎdzǎda*, *sǎd nakhidzǎda*, the third to twelfth speech, the latter of which we now occupy.

Furthermore, these twelve worlds are subdivided into three divisions of four, the first four being referred to as *nǣ'hodilqǐl*, or the dark world; the subsequent four as *nǣ'hǎlchǣ*, the red world, and the upper four as *nǣ'hodotǣsh*, the blue world. Some of the chant legends (*hatqǎǎkǣ*) begin with events in one of these three groups of worlds. In this manner some speak of five, others of eight worlds, etc.

THE PEOPLES OF THE DARK WORLD.

The above mentioned worlds are not spoken of as having been created, but as already existing. The first world (*sǎd ǎǎl*) is inhabited by the Ant People (*wolazhin dinǣ'ě*) who are subor-

dinate to chiefs or spokesmen in the east, south, west and north. In the second world (*sād nakhf*) they find *wóneshchīndi hastqfn* and *wóneshchīndi esdzān*, the Locust Man and Woman. The third world (*sād tqā*) being uninhabited all of these peoples travel to the fourth world (*sād dī*) where the following persons are found: *atsé hastqfn*, First Man; *atsé esdzā*, First Woman; *atsé hastqfn*, First Man; *atsé esdzā*, First Woman; *atsé hazlf*, the First Made; *akédæ hazlf*, Second Made; *atsé ashkhf*, First Boy; *atsé atéd*, First Girl; and *atsé hashkké*, the First Angry, or Coyote. First Man and his eight companions are the first witches (*idantf'*), and the cause of sickness and fatal diseases.

nfbil hodidezlf, he who originated with the earth, is applied to First Man (*atsé hastqfn*). The name corresponds with the sacred name of the kit-fox.

THE PEOPLES OF THE RED WORLD.

The Peoples of the four preceding worlds ascend to the fifth world (*sād ashdlá'*) where they are joined by *wósækīdi hastqfn* and *wósækīdi esdzā*, the Grub Man and Woman. The sixth world (*sād hastqá'*) is uninhabited. The seventh world (*sād tsostséd*) they found inhabited by the *nishdúi dinæ'è'*, the Cat People. They also met *nashjéi hastqfn* and *nashjéi esdzā*, the Spider Man and Woman. The Cat People were *adilgáshi*, evil shooters (witches), who filled the bodies of their neighbors with evil by shooting. First Man removes this power from them and makes it his own property.

sād tsebf', the eighth world, is the home of *ášhf hastqfn* and *ášhf esdzā*, the Salt Man and Salt Woman, and also of *hashchélzhīni*, the black *hashché'*, or Firegod. (In the legend of witchcraft the latter is introduced with First Man and his companions in *sād dī*, the fourth world.) The Ant People, of whom mention was made first, also find another colony of Ant People with whom they immediately associate. The *tfish dinæ'è'*, or Snake People, are also introduced here, together with the *sási*

dinǎ'ě', Yucca People; and qōsh dinǎ'ě', Cactus People, dótso, the Big Fly, níké'ni, a beautiful bird (Owl), and máí' dotfish, the Kit-fox. First Man erects the first hogan here, the type for the present hogan. He then displays all the material for the future sacred mountains, for the dawn, the sky-blue, the twilight and darkness, the future winds, rains, lightnings, the future hashché, and so on. To each and every one he presents some of his evil power, so that all are possessed of witchcraft.

But he also designates various herbs as a remedy for all evils, poisons and diseases which he has distributed, and designates the ké'án (prayersticks) and sacrifices necessary to remove them. All of the above mentioned peoples therefor require a sacrifice (biyéł).

THE PEOPLES OF THE BLUE WORLD.

When First Man and his now numerous companions entered sād naístaf, the ninth world, they found it in possession of the beautiful wolachī litso altsísigi, the very small Yellow Ant, who were in communication with wolazhín altsísigi hízín, the small Black Ants of sād nezná', the tenth world. By fraudulent means First Man and the Salt Man deprive them of their various juices or grease (aká'), their only possession and sustenance.

THE ELEVENTH WORLD.

The place of emergence in sād ladzáda, the eleventh world, is called nqālogai, whitish earth. The peoples of this world are very numerous, counting among their numbers a group of nashdái dinǎ'ě', Cat People, the Bear and Deer Families, Foxes, Badgers, Skunks, Birds, Fishes, and finally Water Monsters. The people of the land are subordinate to the Big Wolf chiefs in the east and west, while the Wildcat chiefs are spokesmen in the northern and southern villages. These direct their subordinates in farming and the chase. The domestic labors and functions are assigned to the female portion, and all spare time

is devoted to various sports, as the bouncing stick game, dice, hoop and pole, football, etc.

This happy and innocent life undergoes a change when First Man introduces generation, which until then had been unknown to these peoples. An altercation between the chief of the east, Big Wolf and his wife, over the neglect of her duties, is the cause of the separation of all men from the women. Accordingly, at tqô alnâosdlî', where the waters flow in various directions, the men cross to the opposite shore in boats.

The men now set about their duties of farming and hunting. The domestic duties of cooking and grinding corn are supervised by one nâdle, an hermaphrodite. The ceremonial method of planting is observed here for the first time. Thus they had the circle, the square, the border, and additional farms. Hunting, too, is accompanied by various ceremonial observances. Their leisure time was given to amusements. Venereal excess is punished instantly in mysterious ways, though it is always removed by the power of some ceremony. Respect for these is also drastically inculcated by making an example of a stray coyote.

The women neglect their duties while the men are thrifty. Their passions wax strong, and they become guilty of many immoralities. In seeking suicide, many drown themselves without having the hope of resuscitation by ceremony. From want and starvation they are finally driven to plead for mercy, after a period of about nine seasons of separation.

The reunion is the occasion for a ceremony of purification, including sweat-baths (tqâché). The routine of labor is again harmoniously followed out as before the separation, the women assisting their husbands in planting and harvesting. Incest is pointed out as the cause of mental derangement. Witchcraft is deftly punished by First Man, and checked in this manner. Diseases of various kinds, such as blood-spitting, etc., are cured by the rites. Dreams are invariably considered as portending evil. Presently, too, it occurred that at'éd diyîni, the Holy Girl, a virgin (khâ' âlini), who had been impregnated by some

unknown stranger, gave birth to a shapeless mass, a gourd, from which sprang two male children. These gourd children (*adé ishchfni*) rapidly attain maturity and develop a love for retirement and roaming.

THE EMERGENCE FROM THE LOWER WORLDS.

The Coyote of the west, *náhotsoi alkinádel má'i*, who joined the people below, was an inquisitive fellow. It happened that one of the children of *tqé hóltsödi* (Water Ox) was discovered one day floating on the waters near their camp. The Coyote unobservedly took possession of it, hiding it in his garments. Presently the waters from all directions threatened the People with destruction, which is averted by First Man who hurriedly created four mountains for them, which he bids them ascend. The Turkey is charged with checking the rise of the waters, which he does by placing his tail in them. But when the waters had risen to the summit of these mountains the Gourd children were asked to assist. (They had entered the camp shortly before the flood, each carrying a reed (*lúkätso*) in his hand, one taken from the west, the other from the east.) The elder of the two boys then placed his reed on the summit of the mountains, and when the People entered, the twelve joints of the reed increased in size as they ascended allowing them to gain a considerable height. The waters, however, still continued to pursue them, so that the reed of the younger brother was placed just over the other. But when, after traveling through the twelve joints of this reed also, the waters continue to rise, their suspicions are finally turned toward the indifferent Coyote. He is searched by the Locust, and the discovered child is replaced on the turbulent waters which immediately became stationary. The hard roof or vault which they had reached is successfully pierced by the Wolf, the Bear, the Badger, and finally by the Locust, who is then sent to investigate this upper world.

Here the Locust encounters a monster from the east who challenges him to pierce his mouth and rear with arrows. The Locust, however, pierces his sides, after removing his vitals, and obtains possession of the land. He is forced, in turn, to meet a similar challenge from monsters in the south, west and north, whom he defrauds in a like manner.

Upon his return to his companions they dispatch *nāaskīdi*, Hunch-eye, and *tsétqādebē*, the Bighorn, to remove the waters and make the earth inhabitable. The former discharges zigzag lightnings east and west, the latter straight lightnings north and south. The ensuing rush and uproar of waters forces them to a hasty retreat into the opening, which is covered by the webs of the Spider Man and Woman. And when the tumult has finally subsided the Wind People (*nīlchī' dinā'ē'*) were dispatched to dry up the surface of the earth. Thereupon, the exit is made by means of ladders which had been made by First Man for the occasion. The emergence is called *hajīnāl*, moving upward.

THE TWELFTH OR PRESENT WORLD.

The earth was small in size, and here and there small bodies of water were observed. Some of the people camped at the shores or banks of these lakes and were known as *tqābā dinā'ē'*, the people at the edge of the water; others made huts of mud (*hashtīshnī*, mud people); others camped below a ledge of rock, and so on, each being designated by a peculiarity of this kind. And when it developed that one of their number was missing a search was made for him. He was finally located in *hajīnāl*, the place of emergence, but refused to leave, saying that the future people of the earth would return there. Therefor, the people of this earth (*nīhokhā dinā'ē'*) return to *hajīnāl* after death. The person remaining there sallies forth at times to collect food and pieces of broken pottery which have been left at the habitat of the deceased, for he promised his companion to do this.

THE CREATION OF THE VISIBLE WORLD.

The events after the emergence, as embodied in the legends, are called *diylnkēgo oqōt'id*, it happened in the holy way, or the holy events.

The *diyln dinā'ē'*, Holy People, then decided to make the earth a suitable dwelling for its future inhabitants (*nīhokhá dinā'ē'*). Accordingly, after First Man had built the hogan (*hoghán*) he created the sky, earth, sun and moon. As a material he used various precious stones, giving to each the shape of man, and breathed the spirit of life into them. He also created summer and winter, which he assigned to the earth (*nahosdzān*) and sky (*yádilqil*) respectively.

CREATION OF THE STARS.—*hashchézhini*, the Firegod, placed the various constellations in their respective positions. He is also accredited with blowing the stars of the milky way across the sky. Such other stars as he wished to keep in reserve were scattered by the Coyote (*atsé hashkhé*) over the heavens. The Navaho, therefor, have no names for many constellations. The Coyote planted but one star permanently in the heavens, which is therefor called *má'i bisó'*, coyote's star.

VEGETABLE LIFE.—The sacred mountains had been given their positions by First Man when he invited the various Peoples to contribute to the completion and beauty of the earth. Accordingly, the various animals planted the seeds of trees, shrubs, plants and grasses, which they had brought with them from the lower worlds. Thereupon, First Man breathed upon them so that they, too, might see and live. The clouds, winds and thunder were placed on the sky (*yádilqil*) so that moisture might be supplied and vegetation secured.

THE BEARERS OF THE SUN AND MOON.

When First Man had made all things for the earth and sky, and given them stability, he selected the Gourd children, of



whom mention was made above, to carry the sun and the moon. These he placed on their left shoulders, leaving their right hand free to enable them to eat when traveling. Thirty-two trails (*bitqfn*) were assigned to the sun (*johona'af*) for his daily travels. To compensate themselves both the sun and the moon (carriers) stipulated one human life for every journey (*nalyéhe*, pay).

First Man also placed pillars in the east, south, west, north and center of the earth (*bitšfs lagai*, etc., white, blue, etc., body or pillar). And raising the sky (*yádilqil*) he placed it as a cover over the earth, resting it on the five pillars (*nfyā nizfni* and *yāya nizfni*, what is below the earth and sky, pillars of the earth and sky.)

He then blew the sun (and moon) beyond the ocean (horizon). And breathing over the earth (and sky) he caused them to expand (about eight inches in diameter). And breathing (*bfilyöl*, blew) the dawn (*hayolkhāl*) toward the east the sun rose (*qayá*) there; wherefore, the dawn is always seen in the east. Since the earth was small, however, the heat of the sun at its zenith became unbearable. After four unsuccessful trials the present dimensions of the earth and the distance of the sun were retained.

THE SEX OF THE PEOPLES.

The various Peoples (*dinæ'ë'*) of the lower worlds are considered male and female. The sun and moon are both male, as also the sky (*yádilqil hastqfn*, the Sky Man). The earth is feminine (*nihosdzān esdzā*, the Earth Woman). The earth (*nihosdzān*) may also be considered as mother of all, insomuch as all *dinæ'ë'* proceeded from it and planted the various seeds there. The Earth Woman (*nihosdzān esdzā*), however, as wife of the Sky Man (*yádilqil hastqfn*), is located in *nfhodotfīsh*, the blue world.

Sex is also assigned to the dawn, *hayolkhāl hastqfn* and *hayolkhāl esdzā*, the Dawn Man and Woman (east); also to the southern blue (azure), *nāhodætīsh hastqfn* and *nāhodætīsh esdzā*, the Azure Man and Woman (south); and to the twilight, *nāhotsoi*

hastqfn and náhotsoi esdzá, (evening) Twilight Man and Woman (west); and to darkness, chahalqél hastqfn and chahalqél esdzá, Darkness Man and Woman (north).

THE CHANGING WOMAN.

The goddess esdzánádle, the Changing Woman, is held in universal esteem by the Navaho. She is not tainted with crime, though by mistake this is done in some legends.

hayolkhal hastqfn, the Dawn Man, and chahalqél esdzán, the Darkness Woman, gave birth to a daughter, which was found and carried home by First Man. When the girl was of fair growth she was found to be very beautiful and of good sense. And when her foster parents called to her in jest: "esdzánádlehé," she readily answered the call with: "yá? what?" She was therefor called esdzánádle, (who is become a woman, or changed into a woman), the woman (changed).

At the age of nubility a ceremony was performed for her, and her nuptials with the sun were then celebrated. (This ceremony of nubility is to-day celebrated with such alterations as were decided upon on that occasion.) Exclusively hozhóji (of benediction) songs were used and the songs of other chants barred. (The vigil, or do-igházh, which must accompany every ceremony in use by the Navaho, consists of prayers and songs of benediction, hozhóji.)

The society of First Man was ever a burden to her, so that soon after this ceremony she left him and traveled to the west. Here the holy people of the cardinal points (Dawn Man and Woman, etc.) had prepared a house for her, which in every respect was like to that of the sun in the east. And when she visited the various compartments in the east, south, west and north, she reappeared dressed in the colors of these directions. And returning again from the eastern compartment she reappeared dressed in yolgai (white shell), wherefore she is also called yolgai esdzán, or the white shell woman. As the wife of the

sun, then, the white shell woman is also called *esdzânádle esdzá*, *esdzânádle* woman, and the sun, her husband, *jōhona'af hastqfn*, the Sun Man, by whom she has two children, a boy and a girl.

THE CREATION OF MAN.

The creation of the various *nahokhā diné'ě'*, or the people on the earth, is attributed to *esdzânádle*, and took place at her dwelling in the west. The Navaho gentes (*diné'ě'*, clans) were created from parts of her body. With the skin which she removed from her breast she formed the *khīya'āni* clan; from the skin of her back, the *honaghā'ni* clan; and removing a particle of skin from below her right arm she made the *tqodichīni* clan; and from below her left arm the *tqótsoni* clan. To each of these particles of skin she added some of the skin taken from her hands, making of each the image of a man, and quickening it by chanting. And when they spoke they spoke the language of *esdzânádle*. The animals, such as horses, burros, sheep and cows, which she made for them, were not given to the Navaho.

She also created the *khis'āni*, Pueblo, the Mexicans, and the Americans, as also their domestic animals, but dispatched them all across the oceans—for when they spoke they had a different language.

She was extremely kind to her children, promised them variegated corn, seeds and plants of all kinds, medicines in case of sickness, precious stones (*ntłfs*), and her protection in general. Therefor, all good things, the mild rains, the growth of the corn, etc., all are due to her beneficent influence, and come from the west. Finally, she presented each with a pet (*hi*), a bear (*shāsh*), wildcat (*nashdūi*), bullsnake (*tłistso*), and porcupine (*dasán*), for their journey to their present habitat.

They arrived on the summit of *dookosłd*, San Francisco Mountains, accompanied by *hashchēłtqī* and *hashchē hoghan*, genii, who deprived them of the valued treasures given them by *esdzânádle*. They made the first sacrifice of *ntłfs*, precious

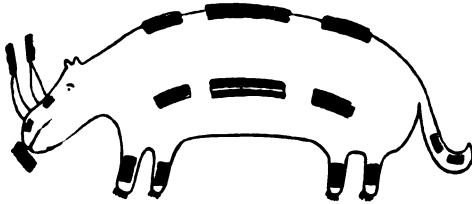
stones, on that summit. They then continued their journey, visited the various sacred places, and affiliated new members to their tribe, until finally they lived in perfect harmony with the *khis'áni*, Pueblo. The traces of this early history are to be found in the numerous ruins of the Navaho country.

THE MAN-EATERS OR MONSTERS.

The manner in which the sun and moon-bearers carry out their threat of taking a human life on every journey of theirs is shown by the introduction of *diné' daiyáni*, man-eating monsters. Similar monsters are said to exist in the Pueblo legends, since they flourished when both tribes were united.

yeitso, the big yei, was the son of the Sun (*johona'af biyé'*).

He slew his victims with various knives (*bash*) which he thrust at them.



Horned Monster--(Delgyed).

delgyéd, the young (*biyázh*) of *tqéholtsōdi*, the water monster, is described as a plump but fleet quadruped having two horns on its snout.

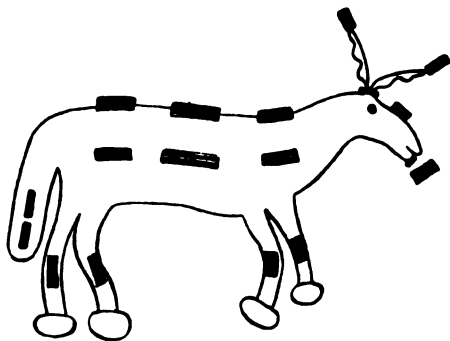
tsé nahalé, the monster crane, which dwelt on the cliffs of *tsebidā'i*, the winged rock, or Shiprock, was made by the sun from a white eagle (*tājilgai*) and white thunder (*i'ní jilgas*).

tsénaghái, the wandering stone, was an offspring of one of the *tqéholtsodi*, water monsters of the lower world. The three last mentioned monsters were the pets (*bilf*) of the sun, who lowered them, together with his son (*yeitso*), on the summit of *tsōdzil*,

Mount Taylor. yeitso made this his abode, while the others sought another vantage ground.

jōsh dilqāshi, the pricking vagina, was formed by the sun and moon out of the marrow of human bones. She is the parent of the following monsters, giving birth to them by coition with various animate and inanimate objects:

tsédahidzitqāli, or the one who kicks from the cliff, and yeitso labái, the grayish giant, she conceived by tsēnastqāni, a heap of stones.



Water Horse.

binā yeaghāni, who killed by (the charm of) their eyes, she conceived of sōtso dilqil, the big dark star.

bijōsh yeda'á', the overwhelming vagina, who crushed their victims with this organ, she conceived of qosh nāolāli, cane cactus.

tse aqéndil, or the cliffs which bound together (crushing), she bore by combined tsenastqāni and tseāwhōzi dilqil, dark boulders.

shash naalkhāi, the pursuing (tracking) bear, was her offspring by the mountain.

In a similar manner she brings forth:

jádi nakhidzāda, the twelve antelopes, by plants.

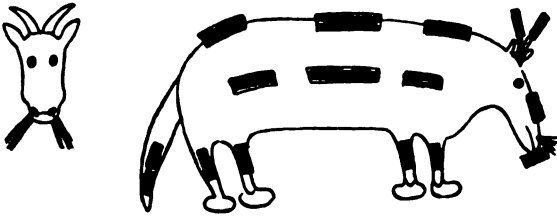
lūkā digfshi, the slicing reeds, by lūkā, reeds.

tséyí' donahúntí', the impassable crevice, by tsedokál, fire-clay (?).

saitád, the rising (whirlwind) sand, by natéflid, rainbow.

Finally, tñish don'tñhi, the impassable snake.

As the names imply, most of these monsters pursued their victims to death, all, however, were bent on the destruction of mankind to gratify the sun and moon.



Water Ox.

In addition, many evils are personified, as:

dichín hastqín, hunger, starvation.

tqé'i hastqín, or tqé'é'i', poverty.

yá'hastqín, or yá'lgaf hastqín, lousiness, filthiness; (some mention tqálawhúsh hastqín, cleanliness, as a necessity).

sá', old age, decrepitude; bíl, sleepiness, drowsiness.

yéitso habá', the big gray god, and ása nayéhe, the beet-beetle.

tqéholtsódi, a water ox; tqéll, a water horse.

The monsters usually figure in witchcraft, and are *native* enemies in distinction from foreign or human enemies. Hence, the special blackening mentioned elsewhere (hochóji jintésh).

THE SLAYERS OF THE ENEMIES OR MONSTERS.

The mother of the Slayers of Enemies is the child of yádítqil hastqín and nahosdzán esdzá, the Sky and Earth. The nubile ceremony was not performed over her. She was impregnated, however, by the adulterous Sun, and also conceives of the trickling water of a fall. She gave birth to two children, the child

of the Sun being called *nāyénezhāni*, the Slayer of the Giants (monsters), while the other answered the name of *tqobajishchñi*, the Child of the Water. When they discover their descent in early youth the children journey to the sun in order to enlist the aid of their father in ridding the earth of its monsters. Though the petition includes his own offspring the sun grants it, even to the extent of personally killing his son *yeitso*. In turn, *nāyénezhāni* slays all the monsters and thus obtains his name.

Both divinities occur in many of the legends and the corresponding rites, hence, *łtso nádlehe*, turned yellow, and *łeyāneyāni*, reared under the ground, are probably another name for them. The sand-paintings designated by the four names, *nāyénezhāni*, *tqobajishchñi*, *łtsonádlehe* and *łeyāneyāni*, differ only in color. *nāyénezhāni*, the Slayer of Monsters, is also invoked as *nłhūneyāni*, reared in the earth, or *ayayá'neyāni*, reared under the ground, or *néidigłshi*, the one who cuts. The Water child is also invoked as *łłtsowenádlehe*, he who renews everything, and *tsowenádlehe*, he who is versed in all things.

THE WOMAN WHO BECOMES A BEAR.

esdzá shášh nádle is the woman who subsequently changes into a bear. *atēd diyñi*, the holy girl previously referred to, and described as the mother of the bearers of the sun and moon, is again introduced as *jikhé naazłli*, the tingling maiden, or the maiden who makes a noise. Her brothers, twelve in number, are great hunters. Eventually she marries the coyote, who in turn is slain by some of the neighbors. The coyote had taught her how she might change her form into that of a bear, and in this disguise she slays her brothers with the exception of the youngest who, at the inspiration of *esdzánádle*, slays her. The members of her body, which he scatters in the four directions, are changed into bears of various kinds.

THE FLOOD.

A flood (*tqónahűeshkai*, or *tqónāhoskhai*), destroying all the animals and inhabitants of the earth, is attributed to the sun.

The Slayer of the Monsters and his brother again journey to the sun in quest of riches which their father had promised. He grants them on condition that they slay all the inhabitants of the earth for him, which condition they finally agree to. The sun then causes it to hail and rain for twelve days and nights, so that the waters covered the highest peaks. The Holy People (diyín diné'ǵ'), however, had hurriedly carried many of the inhabitants of the earth to a place of safety, and their descendants now people the earth. The waters were removed by the heat of the sun, but the traces of that flood are yet visible throughout the Navaho country.

THE CHANTS.

The origin of Navaho chants (dahatqǵl) is more or less a subject of conjecture and uncertainty, though the native theory is by no means favorable to their foreign origin. But leaving the question of origin aside, the subject of Navaho chants is, we believe, sufficiently intricate and varied to be of absorbing interest to the lover of folklore, as it is practically virgin soil, offering unlimited possibilities. Wonderful results have indeed been achieved by such eminent students as Dr W Matthews, U. S. A., and A M Stephen, whose published and unpublished works have been of valued assistance. Yet a glance at the subjoined list of chants should suggest that comparatively little has as yet been achieved by way of offering a comprehensive study of Navaho mythology which, in reality, forms the basis and ritual for the chants, since the origin and motive of each chant is based upon its own peculiar legend. And it must be a cause for regret that very few of the singers now living in the tribe are conversant with the chant legends and, as a matter of record, are very indifferent to acquire such information. In consequence, many of the chants are becoming extinct, and the singers conversant with legends, songs and prayers are fast disappearing without a possibility of filling such vacancies. It is also well established

that much *singing and exorcising* is continuously practiced by a class of inferior and ignorant apprentices, whom the Navaho designate as *azā onfligi*, who offer a mouthful, implying that they make a few prayersticks accompanied by a song or two. Then, too, much of this material is subject for dispute, especially among that set of singers who fabricate legends to suit their own pretensions. Hence, the extinction of the existing and more difficult chants is conceded as inevitable by the remnant of conservative and studious members of the chant lodges, for want of proper pupils. Efforts are consequently being made to obtain a complete account of the various legends with a view of supplementing those already existing, such as the night and mountain chants, by Dr Matthews.

The various chants may properly be divided into such as do not deal directly with the *yei*, or Gods, and such as originated with and from the Gods.

Among the first class, or earlier chants, the *hanelnâhe*, or moving upward, forms the basis for the others, as its beginning is with the lower worlds, continuing with the emergence from them up to the time of the creation and dispersion of the *yei*. The order of the chants would be about as follows:

The *hanelnâhe*, or moving upward, a chant which in its various forms is still largely in demand. It is often designated as the *hochôji*, or ceremony for dispelling witchcraft.

The *anâji*, or chant for dispelling foreign enemies, more popularly known as *ndâ*, the war dance.

The *yei hastqnikê*, the rite of the godmen, which was extensively in demand on raids and in war, though at present rarely in use.

The *nayêhe*, or rite for dispelling monsters. This is also referred to as *hochôji jintêsh*, the blackening against witches or native enemies, in distinction to *anâji jintêsh*, or the blackening against foreign enemies, as the Utes, Comanches, Americans, and the like. The two are war dances, though the *anâji* is ordinarily meant when speaking of a war dance. As both are

branches of the *hanełnéhe*, and the monsters or *nayēhe* figure largely in this rite, the designation, *hochōji jintēsh*, as implying native enemies, is not far-fetched.

The *hozhōji*, or renewal, and rite of benediction, is essential to every Navaho chant. Accordingly, the nine night ceremonies set one night aside for this blessing, which is referred to as the *doighāzh*, or vigil, while the five and one night ceremonies subsequently require a special set of *hozhōji* songs for their completion. Outside of its connection with the chants it appears as a one night ceremony of blessing upon the hogan, the members of the family, their chattel and real estate, their crops and occupations, such as weaving and singing, their propensities to greed, at the nubile ceremony, or the birth of a child, the dedication of a new set of masks, for the purification of the ceremonial paraphernalia, in fact, for almost any phase of domestic life.

The *natōye bakhāji*, a rite for dispelling the darts of the males, such as lightning, reptiles, and the like.

The *tsāha*, or awl chant, which is not in vogue.*

The *nlōæ*, or bail chant, is also extinct.

The *sōtsōji*, or big star chant, is still in vogue.

The *dinē bñłčłji*, or Navaho wind chant, is much in use. The winds are personified and injurious.

The *mā'iji*, or coyote chant, is disappearing. The *ajłti*, or rite for the removal of mania and prostitution, which is part of it, is still in vogue.

The *atsōsiji*, or feather chant, is sometimes in demand. The requisites, however, in the shape of numerous baskets, buckskins, and the like treasures, as well as the great amount of labor entailed in the preparation of numerous prayersticks, do not add to its popularity.

The *tqōæ*, or water chant, is not mentioned frequently.

The *nidzłji*, or corral rite, for corralling antelope and deer, was largely in use at the chase at large, which has subsided at present.

*A M Stephen gives an interesting account of the manufacture of the first moccasin. Presumably this is the origin of the awl chant.

The *na'tóye ba'áji*, or female branch of the lightning chant, is still in vogue.

The *atsá aq'níl*, or *yóæ*, or rite for trapping eagle, the eagle or bead chant, is also in demand.

The other chants, which begin after those just mentioned (or rather after the emergence), are usually designated as *diylnkëgo oqótíd*, the happenings of the Holy Ones, as they relate largely to the *yei*, or Gods. These are:

The *dziłkłji jikhæ shâsh nádle (átłgi hatqál)*, the branch mountain chant of the maiden becoming a bear, (the mountain chant of Dr Matthews). This, with the *hozhónæ*, the chant of beauty, (relating the metamorphoses of the bear and copperhead [*tłstso*]), by which they inveigle two beautiful maidens into marriage with them), are designated as *aqéhodłtłgi hatqál*, or chants of the same (legendary) branch which finally meet again.

The *tléji (qátłgi)*, the night chant branch, or *yéibichai*.

The *akhéshgân qátłgi*, the branch of the claw dance.

The *khâsi*, or feather-shaft chant, which is often designated as *béshe*, or knife chant, or *ináji*, life chant.

The *dziłkłji na'tóye (qátł)*, the (branch) of the mountain chant of those sending forth darts.

The *yóæ* of *tsédez'á*, the bead or eagle chant of the rock promontory. This is the bead chant partly described in the *Legends* of Dr Matthews, while the *yóæ*, or bead chant mentioned above, begins with the monster eagle of Shiprock (*tsebidái*).

The *łáji sîn*, or one day song, which is so called from the legend in which a person is slain by a bear and revived in one day. This is extinct.

In addition to these, the *wolachłji*, or red ant chant, the *hash-chétsohi (hastšétsohi)*, or big god chant, and *chłshi bñłchłji*, or Chiricahua-Apache wind chants, are much in vogue. The latter is often designated as the *whótsłji*, or *whotséji*, or *whotsée bñłchłji*, the tooth-gum wind chant, or by its Apache name, *golaghái*.

In addition to the three branches mentioned for the *naʔóye*, or the lightning chant, the mountain chant, too, has several variants. Ordinarily the *dziłkʃji bakháji*, or male mountain chant, is meant when speaking of the mountain chant as such. There exists, also, a *dziłkʃji baʔáji*, or female mountain chant, and another variant designated as *ayázhiji*, or the mountain chant to the small birds.

Divination, as preparatory to various chants, is also practiced in one form or other. Divination by sight (*destʔi*), or star reading (*sôtsóji*), consults the stars and such animals whose sight is very marked, as that of the turkey (*tqázi*), or magpie (*áʔáʔi*). Divination by touch (*ndilnfji hatqál*) consults the breeze and winds (*nłchʃji*), or animals such as the Gila monster (*tqínlaʃ*). Divination by hearing (*istsá*) consults the winds and such animals whose sense of hearing is highly developed, as that of the wolf (*máʔitso*), or felines in general (*nłshdú*).

Of the chants in existence, some are conducted for nine nights, others for five, and a few for one night only. Thus, the night chant (*tłéji*), the mountain chants (*dziłkʃji*), the wind chant (*diné bñłchʃji*), the coyote chant (*máʔiji*, or *ajłli*), the feather chant (*atsósiji*), the water chant (*tqóæ*), the big god chant (*hashclétsohi*), and the lightning chants (*naʔóye*), are nine night (*naastáʃ tłéi*) ceremonies.

The bead or eagle chant (*yóæ*, *yóiji*), and the *nłchʃji*, wind chants, and rites of divination, as the big star (*sôtsóji* and *ndilnfji*, by touch), as well as the prostitutes' chant (*ajłli*, or *máʔiji*), are also conducted for five nights (*ashdlá tłéi*), while the witchcraft chant (*hochóji*, or *hanelnéhe*) is now always conducted for five nights only, though formerly nine nights were required. Similarly, the red ant chant (*wolachiji*), and the beauty chant (*hozhónæ*), are five night ceremonies.

The *hozhóji*, or blessing, is now a one night ceremony, though originally of four nights' duration. The knife or feather-shaft chant (*béshe*, or *khási*), and the Chiricahua wind chant (*chʃshi bñłchʃji*), too, are of one night's duration.

The list, while fairly comprehensive, may possibly be increased by some extinct chants, such as the *níji*, or earth chant, and others.

THE WAR DANCE.

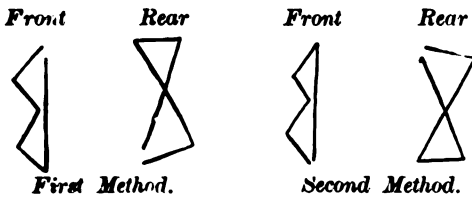
The so-called war dance, extensively in vogue with the Navaho to-day, originated with the mother of the Slayer of Monsters (*náyénezháni*) and the Child of Water (*tqobajishchíni*). For, it is said, when they had slain the monster *yeitso*, they carried his scalp as a trophy and hung it on a tree previous to reporting to their mother. While relating to her of the encounter with the monster they swooned and lay unconscious, whereupon, it is said, their mother prepared a concoction from herbs struck by lightning, sprinkled them with it, and shot a spruce and pine arrow over their bodies, thus reviving them.

Accordingly, to-day this ceremony is conducted in cases of swooning, or weakness and indisposition attributed to the sight of blood, or of a violent death of man or beast, especially if this has occurred to a pregnant woman, or even to a husband or father during the period of her pregnancy. While no special season seems to be prescribed, the ceremony is most frequently conducted in the summer and fall of the year. The singers performing it are known as the *aníji*, enemy, or war singers, as in addition to this ceremony they were also in possession of all the rites prescribed for the warpath and raids.

The special features of the war dance are the carrying of the rattlestick, the dance of the Navaho girls, and the blackening of the patient.

The rattle consists of a juniper stick about a yard long, or the length of a cord held at arm's length from the tip of the left hand to the right nipple. This stick is held upright in the left hand the fist resting on the knee, while with the finger-nail of the right thumb incisions are made in zigzag form to represent a bow. As custom varies, some of the old people supervising this

function insist that the opening of the bow, or the end where the bowstring is slipped over the notch, be made at the upper right hand corner, while others require the opening in the opposite, or lower right hand corner. Similarly, the incision made on the rear of the stick, to represent the queue, varies with the opening made for the bow. Such as make the opening of the bow in the upper right hand corner make that of the queue in the lower left hand corner, while the opening in the lower right hand corner of the bow requires a similar opening in the upper left hand corner of the queue. These figures illustrate the two prevailing methods.



This done the singer applies a mixture of animal tissue to the stick and blackens it with the ashes of burnt weeds. He then places a bundle of weeds at the point of the stick, together with a yellow tail feather of a turkey. He crosses the base of the bundle with two eagle feathers, and adds a buckskin thong previously spliced in four and knotted with the small toes of deer, to dangle at its side. The whole is then wrapped and secured to the stick with sacred buckskin. Neighbors and friends then trim the stick with hair-cords, which at present take the form of vari-colored calico bands. These are tied to the stick between the bundle of weeds and the grip, in which manner it is carried forth by the patient to a place usually some ten and more miles distant, where the cere-

mony is continued. In some instances the scalp of a slain American, Mexican, Ute or Comanche is substituted for the bundle of weeds, though at present such scalps are in possession of very few persons.

WORDS.

aghátsīn, the rattlestick; dīkīs, or gād, juniper.

abé dóbil kídésnī, stretched (with a cord) from the nipple.

kídīnshnī (nťé), I stretch my arm out.

bīl kídīnshnī (nťé), I measure with my arm.

dalafji bīlkídésnī, one arm's length.

daālchīshji bīlkídésnī, the length of both arms stretched out.

anāji hatqāli, a singer of the war rites.

anāji, or anāji ndā, the war dance. The ceremony is referred to by other expressions which occur later on.

hastqūi, or nahastqūi, the elders or old people whose customs are observed in the ceremony.

halāshgān be bīkīni'f'nīl, or bīkēeshchf, marks with finger-nail.

achīdó, or achīji altqfn bīkīsétqā, in front the bow is placed.

atsāji tsīyēl bīkīsā'ā, in the rear the queue is placed.

aqénā'ā, the outlines of the bow or queue; chōhót'ī, the opening of either; dégo chōhót'ī, the opening is on top; yāgo chōhót'ī, the opening is at the lower end, as the case may be with either bow or queue.

aghāl bīkīni'nshnīl (bīkīni'f'nīl, bīkīndeshnīl), I mark the rattle.

aghāl yishtlā (sēltlā, deshtlā), I grease the rattle.

tlā nashchfn béstlā, it is greased with mixed tissues. This is a mixture of tallow of the deer (bī'), antelope (jādi), bighorn (debétsétqā), the mountain lion (nishdūitsō), the wolf (māitsō), the otter (tqābāstqīn), and the buffalo (ayāni). aghāl yistlā, the rattle, is (then) greased.

aghāl nanātēsh, it is then blackened.

aghāl yishtēsh (shētēzh, deshē'ish), I blacken the rattle.

altqādedlīd be, with burnt mixed weeds or their ashes. The

herbs used are tsildilyfisi (chıldilyfisi), dodgeweed; tľö' nastqási, grama grass; tseězhf' (cheězhf'), a sagebrush (wormwood), and tqũikhál, wormwood sagebrush.

aghál qadishlé (qadishlá, qadideshłł), I prepare the rattle, namely, add the weeds, feathers, tassels, etc.

aghál (tsildilyfisi) bfnishtľö (binéłťö, bidfneshtľöl), I tie the weeds to the stick. The same weeds as above are used for this purpose.

tqázhi bitsé kisdłtsoi, a turkey's yellow tail feather.

atsá bitsé, the eagle tail feathers.

bádasėnlł, the tassel, or that which dangles on its side. This is usually called akhėshgān, the small toes of a deer (bľ'behėshgān), as these are used in making the four knots in the spliced buckskin (abáni). Weeds, feather and tassel are then wrapped and wound with sacred buckskin (dokałéi bił biłdesdız).

tsıťľöl biłťtqá, it is carried with the hair-cords, which are tied to the shaft of the rattle.

bá'ndá (or bandái) yotqłł, the patient (or he over whom we sing) carries it.

aghál ānshtqł (āntqā, adeshtqłł), or aghál nshtqł (ńtqā, deshtqłł), I carry the rattlestick.

łtqł, or dijł łtqł, they carry it to-day, that is, it will pass in the neighborhood to-day. The first day of the ceremony is therefor called adıťqł (ajitqł), he carries it (himself), it is carried away.

THE GIRLS' DANCE.

The carrying of the rattlestick from one locality to another is always participated in by a throng of interested visitors, and usually proceeds in a frantic rush. Arriving at its destination the hair-cords are removed from the shaft and distributed among the residents of that locality, who anxiously apply for them, and frequently weave them into saddle blankets and small rugs.



Toward evening an ordinary cooking pot is converted into a drum by throwing a few pebbles into it and covering the top with a piece of goat- or buckskin, which is secured around the rim with a cord or thong. This improvised drum is continuously beaten with a small stick while the maidens select a partner from the throng of visitors to dance with. Married women are excluded from this dance, though it is permissible to select a partner from among the married men. Frequently young men pay for the exclusive privilege of dancing with a sweetheart or favorite on each of the three nights.

The dancers perform in a circle, though no special order is prescribed. Each maiden, standing behind her partner, grasps his side and completes a circle or two with him, reversing the circle occasionally to avoid dizziness. As all participants hum and sing while in action the whole ceremony has been popularly designated by this feature, or as the *ndá*, or *ajindá*, they all hum moving, the war dance, or rather the girls' dance (*squaw dance*). After completing these motions several times the girl releases her partner and, unless otherwise stipulated, charges a fee of five to twenty-five cents for the privilege granted, or an equal amount for the privilege of being released. The dance is continued until about midnight when the party disperses to retire.

On the following morning the rattle is again carried to some other distant place and is borne, not by the patient, but by one acquainted with the prayers required for its final deposit, who, thereafter, takes charge of the rattle until the close of the ceremony. In the evening of this day the *ndá*, or girls' dance, is repeated as on the preceding night, and is in turn followed on the third morning by the bearing of the rattle to the place selected for the close of the ceremony. Here the patient is blackened about noon.

WORDS.

itqá (*bitlé*), the night after it has been carried, designates the first night of the ceremony.

ichōshi dajilzhīzh, turning they dance; bāhastqīn ādini, having no husbands, or unmarried girls.

nizhnædā, we danced last night; nizhnædā, we have had the ndā, or the close of it was last night; nizhdīnodā, there will be a ndā, or dance, to-night, etc.

ndā, the girls' dance, the war dance; ajindā, they all sing moving; nidā' (nīdā' nt'é), we all sang moving, we had a dance.

qūejfclōsh, or bejfclōsh, she turns him, that is, he is her partner, she selects him. Similarly, shæ'écclōsh, I am her partner, she selects me; ænāclōsh (ænāzhclōsh, édoclōsh), he is her partner, or shænāclōsh (shænāzhclōsh, shédoclōsh), I am her partner.

bi'l'ishzhīzh (bi'l'ëshzhīzh, bi'l'ideshzhīzh), I dance with him or her.

ænāshclōsh (æshécclōsh, édeschclōsh), I turn (dance with) him.

ba'itqī, it is carried for him; ba'itqāi, he who carries the rattle for the patient, the rattle bearer.

ndizā (pr. ndizé, fut. ndidozél), they moved (on the morning of the second day), the second day of the ceremony.

biclīshnjē, they are toward it (toward the final place), the second night.

nanzā (pr. nazé, fut. ndozél), they moved, the third day, or the bijf, and last day of the ceremony.

jīntēsh (jineshtēsh, jidīnot'ish), he is blackened, or dijf (alnæ'āgo) zhīntēsh, to-day the blackening takes place (at noon).

THE BLACKENING OF THE PATIENT.

At noon of the third day the body of the patient is painted black. Juniper branchlets (gād ni'éli), with yarrow (hazailtséi), meadow rue (tqāzhilchfn) and pine needles (nīshchf bī'fī) are previously pulverized, then thrown into a bowl of water, and stirred. One of the assistants now takes a dab of this mixture between his fingers and applies it in turn against the soles, the knees, legs, chest, back, shoulders, mouth and head of the patient, who then sips of the mixture before bathing his whole body with it. Thereupon, the assistant chews some pennyroyal (tīō' nīchfn) and

foxtail grass (*hazaidáí*). and holding his hands to the sun sputters the liquid over them. He then proceeds to press the body of the patient, who is seated, turning it first one way, then another, and repeating this four times. This done his body is rubbed with sheep tallow and the usual mixture of animal tissues, after which the ashes of the above mentioned burnt weeds are spread over the entire body, while the patient's face is painted red with a mixture of red clay and grease, with stripes of black drawn across the cheeks and the entire chin. He is now made to step, or rather rest his feet, in dirt dug up by a gopher, which is held in a blanket before him, putting first his left then the right foot into it. The charm, consisting of a tail feather of the roadrunner wrapped with eagle down feathers, is now tied to his hair. Wristlets, too, made of braided leaves of slender yucca (*tsázi tsós*), are tied to his wrists, while buckskin saddlebags, studded with white beads (which are purchased from the Utes), serve as shoulder-bands, crossing each shoulder to the hips. Finally, the bill of a crow is secured to the palm of the right hand, and is used in scratching the head, since the fingers are not to be used in this manner. The patient remains rigged in these trimmings throughout the afternoon and evening, and partakes of a plain gruel (*gád ádin*), after previously saluting the sun by *inhaling the sun's breath*, that is, accompanying inhalation with a gesture toward the sun.

As usual, the day and ceremony is closed with the dance of the girls, after which the singer removes the trimmings from the patient, as also that of the rattle, instructing the bearer of it to securely deposit the shaft. This he does amid prayer, and a secluded crevice or ledge of rock is selected for deposition.

WORDS.

jint'esh, he is blackened, the blackening.

dijí zhint'esh, on this day he is blackened.

ba'ndái nesht'esh (*nét'esh*, *dínot'ish*), the patient is painted black; *nsht'esh* (*nesht'esh*, *dínesh't'ish*), I paint him black.

ḡlil ni'éli, etc., yitsqéd tqasákhágo, the herbs are crushed and the meal mixed with water.

chil qá'ájilē (qá'ájilā, qá'azhdolŋ), the herbs are prepared (from qî'āshlē, etc.)

tāātē adajftlō, he rubs his body.

tāātē adishtlō (adsfstlē, adidéshtlō), I rub my body.

hazeildá'i tlō' níchīn afbīl jā'āli benáhoznól, he sputters chewed grass and pennyroyal.

benásiznŋzól (benásiznēsöl, benásizdŋnosöl), I sputter it over something.

debē bakā' tlānashchfn bīl beēzhdfllā, sheep tallow mixed with animal greases are rubbed in (he is rubbed with them).

behodflthā (behodfstthā, behódidolthā), he is rubbed in (with grease); beshidflthā (besidfstthā, beshdidolthā), I am rubbed in with.

beéshtthā (beséltthā, beédéshtthā), I rub him in.

nishtthā (niséltthā, ndéshtthā), I rub you in.

chī tlā bīl, red clay with grease.

naāzŋsi bilēsh, gopher's dirt (taken from a gopher hill).

nshtfāji, left; nshnāji (khē), the right (foot).

bī'ndsftŋs, he steps in (with right and left foot).

bīnāstēs (bīnāstēs, bī'ndéstŋs), I make a step, place my foot into something.

anāji éltlō, the charm of the war rite.

natédlōzi bitsē, the tail feather of a roadrunner.

bitsōsi, down feathers (of an eagle).

lātsini, wristlets (tsāzi tsōs yishbīzh, braided yucca leaves).

gāghāha'āshjē, shoulder-bands (made of abāni, buckskin, or Ute saddle pockets).

beédichfdi, the scratching implement; (gāge bidē, crow's bill).

johona'af bizhf' jizhfzh, he inhales the sun's breath.

johona'af bizhf' yishfzh (yīzhfzh [bizhfzhfzh], bizhf' deshish), I draw the sun's breath inwardly.

aghātsin nnāzhntqā, the shaft is deposited.

aghātsin nnānshtqf (nnāntqā, nnādeshtqf), I deposit the shaft.

diné yæhózini biłnizhdíłt'égo nnájıtqı, a person well acquainted with the requirements deposits it.

tséyāji nna'ā'nıł, they put them below rocks.

ADDENDA.

In addition to the above it was learned that the war dance is conducted for dispelling foreign enemies only, whether they be real or imaginary. If, accordingly, in fancy one is pursued by foreigners, such as Americans, Comanches, Utes, Pueblo, Cliff-dwellers, or others, and is indisposed on this account, he calls upon the war singers to destroy these enemies. This accounts, too, for the custom of coveting a tuft of hair, a piece of a legging, a whole or the part of a scalp, a piece of bone or clothing belonging to an Apache, Ute, or other foreigner, or purchasing them when seen at a curio store. When these objects are in possession of a friend no time and labor is spared to acquire portions of them if desired for immediate use. A journey of this kind is termed *going on the warpath* (dæbā, I went, or ajfbā, he is on the warpath), and the parts of the enemy required, or designated as desirable for the rattlestick, are usually indicated by the astrologers and diviners called upon previously to trace the source of illness. If successfully obtained the bone, hair, rag, or other trophy, is tied to the horse's tail to avoid contamination, and is hurried without delay to its destination. Otherwise, too, such trophies are held at some distance from one's person while in transportation, being tied to a stick and placed at some distance from the camp, while at home they are hidden in some distant hide-spot for future use. This is a remnant of an old war custom whereby the moist scalp (tsízis dıłlé) was carried in a similar manner, and contamination, or rather pursuit, by the spirit of the slain, avoided by means of the blackening (jint'ésh), or war dance, held soon after a skirmish. The medicine pouch (jısh) of the war singers were, therefor, frequently provided with such trophies as hair, finger-nails and finger-tips

of slain enemies, called *aná bokúntł'í*, or the collar-bone of the enemy, for the purpose of conducting their war rites (*yei hastqfniškë*).

At present the trophy is inserted with the bundle of weeds, and on the final day of the ceremony, when the blackening of the patient has taken place, they are carried out some distance from the place of final gathering and deposited upon the ground by the singer. The throng surrounds the trophy at a respectful distance, while the singer takes a pinch of ashes and sprinkles the trophy with it (*lēshchī iyī'níl*), exhorting the visitors not to gaze upon it while this is being done. When the patient, too, has sprinkled ashes upon it two of the visitors rush up and discharge their guns (formerly their arrows) upon the trophy. They then sing the praises of the patient in slaying or *running the enemy down*. This is concluded in the evening, just before dark, by a general celebration of victory. The rattle bearer, and other invited singers of the war rite, indulge for about half an hour in yelling and rushing at each other with firebrands, a turn which is soon taken up by all men and boys present. The rest of the night is spent in dancing and merriment.

The blackening (*jintésh*) is sometimes performed independently of the other features of the war dance, and may be done in the open, or in the hogan, or even in a modern house.

For dispelling native enemies, such as the influence of the monsters of the legends, and innumerable witches, another war dance, the *hochóji jintésh*, blackening against witchcraft, is conducted.

In the description of the masks mention has been made of the bow and queue as emblematic of the clothes of the Slayer of Monsters and his brother. For similar traditional reasons the openings of the bow and queue are left open on the rattlestick. As the Slayer of Monsters or Enemies and his brother, the Water child, are inseparable in the destruction of enemies, the



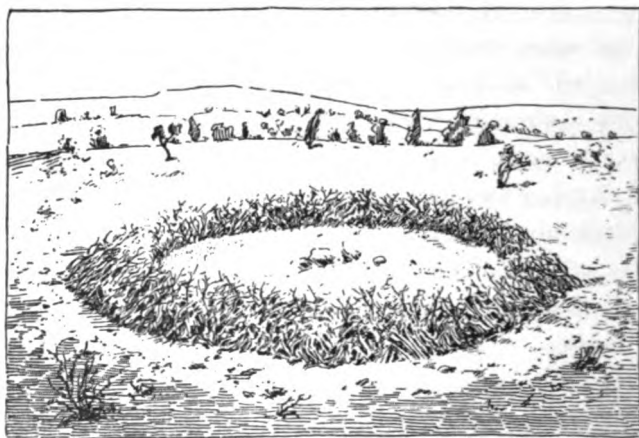
Torch.

symbol of bow and queue are both added to the rattlestick as indicating the power of these two gods.

PUBLIC EXHIBITIONS OR DANCES.

The night chant, and some of the mountain chants, occasionally close with a public exhibition by masked personators, which, however, is not essential to the chant but optional with the patient. When the night chant is to be closed privately, or like any ordinary chant, the masked personators perform inside the hogan, and the mountain chant is limited, in a similar event, to five nights, with the exclusion of drum and dancers.

In public, the personators perform in a corral, and for the mountain chant, around a huge fire built in the center of this



corral, which accounts for the popular names of the corral and fire dances for these two chants. These corrals or enclosures are made of brushwork, set up after sunset, which, in the mountain chant, is done under the direction of the masked personator of hashchêltqîi, the Speaking God, who gives his directions by gestures and his usual call only. The corral is of the same shape

for every public exhibition, and has but one opening in the east, though at dawn the enclosure is broken at the other cardinal points also.

The personators for the night chant disrobe to the breechclout and moccasins, paint their bodies with white clay, and adorn themselves with a silver belt, and the skin of a kit-fox dangling in their rear. Each dons one of the masks, after which they are not allowed to speak, and enter the corral in single file, in which position they dance to the beat of a drum. They leave the corral after some time and make way for another set of dancers to whom they give their masks and regalia. This is continued until dawn is announced, after which the corral is opened.

In the mountain chant the personators, such as the two performing the feat of swallowing the arrows, and the fire dancers, are not masked, but disrobe, and paint their bodies for protection from the excessive heat. A variety of legerdemain was in vogue at this dance, such as the growing of yucca, the dancing porcupine quill, and other performances, which took up the intervals. Originally, custom required the messengers, or meal sprinklers, to invite foreign tribes to contribute with their magic for the occasion. Later these invitations extended only to the shamans of the tribe whose insignia, when they had such, were borne to the place of celebration by the messenger. Eventually, much of this formality was dropped, as performances of magic are exposed to the ridicule of the younger generation, so that invitations to the various *lodges* of medicine men are extended merely as a matter of courtesy. The various performances, however, are responsible for such designations of the mountain chant as the fire dance, growing hashkán, or hashkán dance, etc., just as the night chant is sometimes designated as the yeibichai dance from the leading personator.

Ordinarily, a ceremony is performed over a single patient. It is permissible, however, to conduct a ceremony for two patients of the same sex, so that, for instance, a ceremony may not be held over man and wife simultaneously. A singer may

conduct a ceremony over his own wife, but not for his own benefit, for which he must call on the services of another singer. In the event of two patients there are two meal or pollen sprinklers at the public exhibition in place of the customary single one. Other changes take place in the various songs, and especially in the distribution of the prayersticks. (See Prayersticks).

The night chant is performed over persons as well as over the masks themselves. An instance of this kind has been mentioned in the dedication of a new set of masks. Another instance is the purification of a set of masks defiled by the death of its owner, or that of the patient for whom the chant is conducted. In this event the masks may not be used again unless the night chant, specifically its *vigil*, has been performed over them.

It is customary that guests attending the close of a ceremony partake of a repast at the hogan where it takes place. At public exhibitions, where the multitude of visiting guests is unusually large, this has been abolished, and is now limited to the meals which the patient must provide for the singer and his assistants. At the smaller ceremonies of one and five nights' duration meals are served to the guests about midnight. Accordingly, the meal served there is sometimes referred to as the close of a ceremony.

WORDS.

naákhaí, they appear; or yei nakhaí, the yei appear; or diné daálzhfzh, the people dance; or yéibichaí, the yeibichai dance; or tléji, the night chant. The latter refers to all the ceremonies, while the former expressions have reference only to the public exhibition and indicate that it will take place.

ilnáshjIn (ilnáshjInji), the corral, or corral dance, is also used for any exhibition of a public character.

alfl, magic or legerdemain. The swallowing of the arrows, sprouting of the yucca, dancing feather or quill, are referred to as alfl.

azhnidá, they go around (the fire), the fire dance.

dziłkfił, the mountain chant.

atsále, the personators. Usually the four leading dancers at the yeibichai bear this name, though it is also applied to others.

tqó nenfli, the water sprinkler, or clown at the fire dance.

bikéhatqáli, he over whom they sing, the patient.

nakhi bikehatqáli, two patients, who are usually indicated by the term, aqđiášh, they go together.

do-igházh, the vigil.

hozógo náhodleł, they (the masks) should be purified or restored again.

yáhada'ilyé (yáhada' isyá', or yáhada' iyá', yáhadadiyolyéł), the meal (or feast) is prepared.

yahada'íkhá (yáhada' ískhá, yáhadadiyokháł), it is poured out. The implied meaning is one's intention of attending the close of the ceremony.

hatqálgi da'ilyé (n'áé), the ceremonial repast (at the close of the ceremony).

bijí, it's day, the closing night of a ceremony.

bijígo deshál, I will attend the ceremony.

The Choice or Selection of Chants to be Performed.

The decision as to the particular chant to be selected is left with the individual. Owing to the great variety of causes for disease and continued misfortune the choice is often a difficult one. If relief is not obtained the rites and ceremonies of another chant should be enlisted to secure it. In this manner a fortune is often spent. Public opinion has it that a person bitten by a snake, struck by lightning, thrown from or kicked by a horse, is pursued by some unseen power. The bite of an ant, or mad coyote, continued prostitution, or venereal excess, loss of sheep, failure of crops, sickness or death in the family or relationship, all portend some malign influence. This is also the case with dreams bearing on misfortune. A pregnant woman

especially must exercise the greatest care lest she observe anything in the shape of violence. The influence of bad dreams must be removed during the time of her pregnancy, both by herself and her husband. If this has been neglected the duty devolves upon the child, even at an advanced age.

In such manner each case is carefully diagnosed and discussed by the family and their relatives who, in addition, often consult astrologers and diviners for the purpose of selecting the appropriate chant.

THE EXPENSES.

Expenses vary according to the nature of the chant and aggregate for public exhibitions as high as two hundred dollars and more. For the minor chants the price consists of a horse, cow, some sheep, calico, etc., according to the means of the patient. The legends inculcate that the shaman render his services without compensation in case of need. A nominal price is sometimes asked in such instances, though frequently assistance is refused entirely. Friends and relatives of the patient are, as a rule, asked to assist in defraying expenses.

THE CEREMONIAL HOGAN.

Ordinarily the chant is conducted in the hogan of the patient.

Should the hogan prove too small and inconvenient for the proper conducting of the ceremony, as in the mountain or night chant, a more spacious hogan is erected. This is completed before the arrival of the shaman. A ceremony of dedication of the hogan does not take place, though the head of the family, or some other person, may sprinkle the four poles at the cardinal points with pollen. Upon the completion of the ceremony the hogan may be used for domestic purposes.

The *tqáchē*, or sudatory, is also a feature of some chants.

hoghán álya, the ordinary expression for the completed hogan, is also used to designate that the hogan is in readiness for the

shaman. Locally they are designated as *medicine lodges* by the whites. (See Navaho Houses).

THE CHANTER OR SHAMAN.

The term *hatqáli*, chanter, implies that the bearer of this title is conversant with one or more of the chants, its prescriptions, songs and requisites. He is a recognized authority on the requisite ceremonial herbs, earths, paintings, prayersticks, etc., and should be in possession of everything necessary for conducting the chant. Persons of an especially retentive memory and natural alertness are selected as pupils by an elderly shaman. In some instances he imparts his knowledge to his son, brother or relative, provided they show some inclination for attentive study, as many years of patient application and rehearsal are required for the necessary proficiency. The pupil is ordinarily bound to repay his preceptor with the fees obtained from the first four chants after his apprenticeship.

The chanter is not obliged to answer every call for his services, but is at liberty to refuse. The legends point out that a messenger was dispatched to the home of the chanter whose services were required. He placed a gift before the singer, who in turn passed it from his left foot upward over his forehead, replacing the gift on his right foot. He then held it to his mouth, inhaling its breath, after which he appointed a special day as that of his arrival. The messenger then carried the pouch (*jísh*) of the chanter to the home of the patient, announcing the day of his arrival, which was usually set at four days. At present the messenger offers the compensation, simply stating that the services of the chanter are sought. The chanter may then refuse, but ordinarily accepts upon learning the cause of the disease and the condition of the patient, and sets the time of arrival at four days. The chanter usually carries the pouch (*jísh*) personally, though the practice of dispatching it by the messenger is also observed.

As a rule women do not perform as chanters, though some are known to have done so. Many women are well versed in the medicinal flora of the country and are often consulted.

The shaman is not always in possession of the complete paraphernalia required in some chants. These are then borrowed for the occasion, and a similar courtesy is returned if possible. The patient must furnish the eatables free of charge to the shaman, as also such calicoes and other incidentals as may be required in the course of the chant and do not belong to the *jish*. These incidentals which, in the hashclétsohi (Big God chant), for instance, are very numerous, become property of the chanter, in addition to the compensation previously stipulated.

While the influence of the chanter is felt it has very little, if any, bearing on the government of the tribe as such. Apparently, their influence is due to their greater or lesser authority on a given chant. Very few of the existing headmen are chosen from the ranks of the *chanters*.

THE POUCH OF THE CHANTER.

The *jish*, or pouch, of the chanter contains all the requisites for a given chant. With the exception of the hozhóji rite, each chant requires a specific *jish*, containing the necessary paraphernalia for conducting the chant according to traditional ritual. The term is then applied to the complete paraphernalia which is always carried in a pouch (*jish*). This is an oblong sack made of dokākéi, sacred buckskin, with thongs made of the same material to secure it. The contents of the pouch consist of feathers, rattles, stones, pollens, animal tissues, native herbs, ochres



and clays, and additional paraphernalia for specific chants, some of which are difficult to acquire. The lightning chant, for instance, requires two cane reeds (lúkātso) with tassels (bizól), one taken from Taos (tqówhól), the other from the west (Oraibi). Others require arrow-points (bes'ěst'úgi) which have been disinterred by a badger or gopher. Some call for the generative organs of the buffalo, the scrotum, etc.; others for arrow-points upon which a bear has urinated, or at least trodden. A collection of this kind is therefor made only after years of patient labor and research, and is in consequence scrupulously safeguarded. When the shaman has disposed of his pouch before death its contents are sold by the heirs, either in part or whole, as the profit may warrant.

jísh, the medicine pouch.

jísh be bikídesdízi, the wrap for the pouch.

THE HOLY ONES.

The meaning of the word hashché (Holy Ones) as employed in the names of some of the gods is not generally known. Moreover, it is not generally made public by the knowing ones who guard its meaning as a secret.

hashchéltqí, the Talking God of the east, is the child of hayókháí hastqín and hayókháí esdzá, of the Dawn Man and Woman. hashchébá'ád, of the south, is the child of náhodætísh hastqín and náhodætísh esdzá, of the Skyblue Man and Woman. hashchéhoghán and hadachíshi, of the west, the children of náhotsoi hastqín and náhotsoi esdzá, of the Evening Twilight Man and Woman. chaháqél hastqín and chaháqél esdzá, the Darkness Man and Woman brought forth anktáni, the Corn-beetle, and tqádidí, Corn-pollen. The spirit of life (ííclíí) having been breathed into them, the Corn-beetle (anktáni) was charged to give speech or voice (bēinǽ) to the others. When they attempted to speak, however, hashchéltqí could utter only "wuuhú;" hashchéhoghán and hadachíshi uttered "qawó,

qawó;" hashchébakhá similarly, and hashchébá'ád, "wu, wu." And when it was found that they could not speak, it was said of them, "chéhasdzī, it (the child) did not speak, or attempted (unsuccessfully) to speak." By an approximate anastrophe, chéhasdzī became haché, or hashché, the root dzī being dropped completely. Accordingly, hashché designates the *speechless or mute one* in the sense given. It is here rendered with *gods, genii, holy ones*, or some such equivalent.

When these speechless divinities were leaving for the holy places they made the imprint (nikée) of their faces upon yolgai, white shell, dotłfzhi, turquoise, and other precious stones. At present these imprints are represented by the masks.

THE MASKS.

The night chant properly requires twenty-four masked personators, though in late years this number has been limited to fourteen; the yeibichai, six male and six female masks, with tqóněnłli, or water sprinkler. The masks are designated as jışh, pouch, though strictly speaking they are nikée, or face-prints of the Holy Ones (diyłni). The latter expression is now used to designate the mask of yucca which is placed on the patient. The masks used by the *dancers* are made of dokākei, or unwounded buckskin, and are colored and decorated anew for each occasion.

The following is a list of the personators:

hashchéłtqī', or the Talking or the Directing God, so called from his usual role of director or master of ceremonies. He is also referred to as yéibichai, the grandfather of the yei, or gods. The night chant is called accordingly, the *yeibichai dance*.

hashchéhoghān, the House God.

hashchébakhá', or the Male God, of which there are six.

hashchébá'ád, or the Female God, of which there are six.

tqóněnłli, or the Water Sprinkler, who is also called hashchéłbá'i, the Grayish God.

dzāhadolzhái, or zāhadolzhái, the Fringed Mouth.

ghá'āsKidi, the Hunchback.

hashcléshzhfni, the Black God, or Firegod.

nāyénezghāni, the Slayer of the Enemy, and

tqóbajishchfni, his brother, or the Child of Water.

hashcléolt'óhi, the God who Shoots (the arrows).

bādacłfshi, the Lashing God, who lashes or whips.

hashcléłchfi, the Red God.

hashclé idłtsós, the Whistling God.

The mountain chant requires but one masked personator, representing hashcléłtqī, who directs the construction of the corral by his cry, "wuuhú," and by gestures.

The Big God chant also requires two masked personators of hashclétso, the large hashclé, and bowhošqfnāsgai, or the one with the double row of white teeth.

The coyote chant (má'iji) requires hashcléłtqī and zahadolzhá (dzāhadolzhái), the Fringed Mouth. (See *infra*.)

These chants are designated as yei dahulóni, or having the yei, while the others are spoken of as yei adin, or without the yei, or masked personators.

The masked personator imitates the cry of the gods, for instance, "wuuhú," of hashcléłtqī, etc. The shaman always enjoins upon the masqueraders not to speak when wearing the mask. The reason for this injunction is apparent from the above explanation. It is also feared that the offending masquerader should inevitably be visited by some misfortune. To insure against such an event custom requires that the masquerader blow upon the mask after removing it. For a similar reason it was prohibited that maimed and lame persons wear the masks, in fact, only persons of perfect physique and health were admitted. A greater leniency, however, is gradually taking the place of this ancient rigor notwithstanding the futile protests on the part of the better and more conservative class of shamans.

THE DEDICATION AND DRESSING OF THE MASKS.

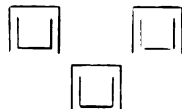
The masks being a likeness and representation of the gods are sacred, and the preparation of them is, therefor, minutely prescribed by ritual. They should not be made in the home as one would make an ordinary article of commerce, but require a ceremony in progress for their construction. The commercial buckskin is not admissible as material for the mask. The hide of a deer, shot with an arrow or bullet, is equally rejected, as it is essential that the animal be run down and lassoed, after which pollen is placed upon its tongue and it is strangled to death. (do-kākēi, the hide and other parts of an unwounded deer, sacred buckskin.) The places for incision are marked off with pollen through which a light mark is drawn with rock crystal (tságha-díndfni) and the incision made with a stone or ordinary knife. The sinews, hide, pollen used in tracing the lines, the excretions of the eye, the toes, and such parts as may serve one or other ceremonial purpose, are preserved as sacred.

The rear of the neck of the deer is used for the front or face of the mask. (Some hold that a doe skin is necessary for the female masks, though others do not make this distinction.) This piece is fitted to the face of the patient, the proper size being obtained by placing both hands on it with the thumbs and index fingers touching each other. The circle thus made along the extremities of the hands and fingers is cut out after previously tracing the mark with rock crystal and pollen. The remnants of the hide cut out are made into thongs and fringed strips for decorating and tying the masks. The back of the mask is fitted and cut out in the same manner, so that masks covering the whole head are composed of two halves one of which only is required for the face masks, as, for instance, that of the female gods.

The two parts are sewed together with dokākēi bitáld, sinew of the unwounded deer. The sewing is done sunwise (shábi-kégo), as with the patient seated facing east, the mask is made to face

that direction, so that the stitching begins at the south end, terminating the seam across the head at the north end or side. The stitches are made with an awl, from right to left, making an ordinary winding stitch. To obtain the proper shape it is fitted from time to time over the head of the patient, which is done with all masks of a set, as the entire set must be constructed and dedicated simultaneously. Accordingly, a number of sewers are employed so that the sewing may be completed on that night. (If one night is not sufficient to complete the sewing, coloring and dedicating, the set is carried to two and more ceremonies for completion.) Feathers of the bluebird (dóli) and yellowbird (ayásiltsoi) are inserted between the two sections along the seam, all tips or growing parts (noséi) of the feathers extending the same way, or upward. To facilitate sewing, and to preserve the leather moist and pliable, hide and sinew are occasionally sprinkled with sacred water (tqó alchín, smelling water), which is used for no other purpose, and is at present difficult to obtain. Some spring, the bubbling of which seemed mysterious, or rain water collected into a hole on the summit of a fairly inaccessible rock, or similar water holes, were termed holy or *smelling water*, and set aside for the above purpose. At the construction of a new set of masks the singer usually dispatched two of the fleetest couriers in opposite directions with instructions to bring such water by sundown of that day.

The sewing completed, the masks are in turn slipped over the head of patient, and the eyes and mouth of the mask are then marked and cut out in the usual manner (with pollen and rock crystal). The eyes on most masks are oblong and triangular, with the base of the triangles facing each other. On some masks, as that of the Slayer of Monsters, and that of the Water child, the eyes are square, while the eyes and mouth of the Talking God (hashchéltqi) are double squares laid against each other (biná and bizé aqfséníl) with one end of each cube left open. The greater number omit the nose, which is painted on the few requiring it.



The mask is then colored with blue (*adishtfsh*), black (*lejfn*), yellow (*lētsoi*), red (*chi'*) or white clay (*dlēsh*), as the ritual may require.

hashcléltqi, the Talking God, is white, with a corn-plant extending from his mouth to forehead.

hashcléhoghān, the House God, is blue.

hashcléibakhā, the Male God, and *hashcléiba'ād*, the Female God, each six in number, are painted blue. The female mask is a face mask and is tied to the rear of the head.

hashcléshzhīni, the Firegod, is black.

hashcléichī, the Red God, is red. This, too, is a face mask.

ghā'āskidi, the Hunchback, and *nā'āskidi*, the Huncheye, use the same mask of a blue color.

hadacifshi, the Lashing God, also requires a blue mask.

nāyénezhāni, the Slayer of Monsters, requires a black mask, while his brother, *tqobajishchfni*, the Water child, calls for a red mask.

hashclélbāi, the Gray God, or the *tqónénlli*, Water Sprinkler, who is usually the clown of the set, is decorated in blue.

zāhadölzhāha, the Fringed Mouth, is colored in blue and red, as the right half of his mask is colored red for the branch of the night chant called *to the rocks* (*tsenfji*), whereas yellow is substituted for red in that branch chant known as *to the water* (*tqaltfá'ji*). Two masks, therefor, belong to the set for this god, though the yellow and blue mask is disappearing altogether.

The base of each mask is decorated with a colored line of yellow and white representing the dawn (*hayolkhāl*) and evening twilight (*nāhotsoi*).

Such gods and masks as make use of hair employ drizzling rain (*nhtsánajin*) for this purpose, which is indicated along the top and sides of the respective masks. Horsehair (*hghā*), or more definitely, horsetail hair (*hī bitséghā*), mixed with a tuft of sheep wool (*debé baghā*), is at present substituted for the drizzling rain.

The painting done, the masks are lined up for dedication. As

the vigil takes place on the sixth day (fifth night) of the night chant the masks, too, must be dedicated then. This is termed *tqo akłtqā*, sprinkling of water, and is performed by two boys and two girls, of the age of ten and twelve years, who have not attained the age of puberty. Each of these carries a feather (*nditqł*, *ndī'ā*), which they dip into water and sprinkle each mask with it. They then feed each mask with a pinch of steamed corn gruel (*neshjłzhi*) previously prepared. This is followed by a general feast of those present at which they partake of bread-stuffs, corncake and sweets, provided, however, that some bee-weed (*wā'*) is obtainable from which to prepare a tea. Whenever this weed is not to be had the feast is omitted, though in any event the feeding of the masks must take place. The masks then smoke (*jish bādihilyā*), that is, the singer prepares a smoke for them from mountain tobacco (*na'to wā'i* and *dzil nātō*), which he blows up and downward four times, following this by blowing the smoke toward each mask. The vigil (*do-ighāzh*) is then continued and is followed by a sacrifice to the talking stone (*tseyāl-tqiji*) of a prayerstick the length of the hand, while a similar sacrifice is made for the patient to the shelves in the rock (*tseininłiti*). However, when the dedication of the masks can not be completed in one night, the unfinished masks are again exhibited at the night chant on some other occasion, which is repeated until the dedication has been properly completed.

At the public exhibition at the close of the ceremony the new set is used for the first time. (See Flagellation.)

A single white feather (*tšōs łagai*), or a tail feather of the eagle (*atsōstso*), adorns the side or center of the mask, which feathers are more numerous on the masks of the Talking and House Gods. The base, and sometimes the tip of this live feather, is additionally adorned with tufts of owl (*néshjāghā*), yellowbird (*tsłiltsoi*) or turkey feathers (*tqāzhitsōs*). At times the center of this tuft is decorated with a turquoise, but more frequently with white clay (*dlēsh*), which is subsequently removed and used medicinally (*dlēsh zā'nł*).

Whereas the two *bilnfhodidezli*, who originated with the world, namely, the kit- and yellow fox (*mâ'i dotfsh* and *mâ'i litsoi*), are numbered with the holy people, their furs are employed as collars and decorations for the neck. A pair of each is used for some masks, as that of the Firegod, of the Slayers, Hunchback, and Fringed Mouth, the heads of the furs being crossed in front with the tails dangling in the rear. Some masks, as the Talking and House Gods, the Male God, and Water Sprinkler or Clown, substitute spruce twigs for the fox fur, while the Female Gods, the Whipping God, and the Red God, employ no decoration about the neck. The collars are known as *mâ'i-litsoi ilbâ*, yellow fox collar, *mâ'i dotfshi ilbâ*, kit-fox collar, and *clô' ilbâ*, spruce collar. The female masks are decorated at the base with fringed rain (*nltsánajin*), or horsehair.

The mask of the Hunchback (*ghâ'askidi*) is decorated with a basket the bottom of which has been cut out. The bottom of the basket thus cut is decorated with zigzag lightning (*atsfn tfish*), while two horns (*dē*), similarly decorated with lightning and downy feathers, extend from the interior in opposite directions with pieces of red stone (*tseichfi*) lined around the rim of the basket. The horns represent ornamental headpieces of cannelcoal (*báshzhñi*), which at present, however, are made of twisted sheep- or buckskin and colored with blue (*adishtfsh*), black (*lejfn*), and white clay (*dlēsh*). The basket, which in the home of the gods is made of cannelcoal, now consists of an ordinary native basket cut out for the purpose, and belongs, like the masks, to the medicine bag (*jīsh*) of the shaman. The whole is placed over the mask as a hat or covering (*tqāastqān*, put on the forehead), and is removed after every performance. Similarly, his hunch, or pack, as it is called (*qēl*, *biyéi*), is made anew for each occasion. This, to-day, consists of a stuffed sheep-pelt decorated in white, red and blue, or the color of the rainbow (*natsfild*, with white, *dságai*), which it represents. Five white (*atsélgai*) and five red (*atsélchi*) eagle tail feathers are inserted into the pack, which is secured to the back by means of cords

representing sunrays (*shābitfól*). He supports himself on a cane (*gish*) and seeks attention by his mournful sighs of *iyahán*.

The decoration of *záhadolzháha*, the Fringed Mouth, is similarly constructed of a bottomless basket, but in place of the horns of the preceding mask a large triangular feather (*tqāātsósi*, forehead feather) of horsehair (*hghá*) is substituted, and topped with three eagle feathers (*atsós lagai*) wound with tassels of grass (*tfozól be bikidesdizi*). Five red feathers (*atsélchi*) extend from the basket. This mask is provided with ears (*bijá*) and ear cords (*játfól*). To distinguish the masks for the two branches of the night chant, as mentioned above, one is designated as *tsenfji záhadolzháha binf lichf*, the Fringed Mouth with the red face for them in the rocks, the other, *tqaktlá'ji záhaholzháha binf hitso*, the Fringed Mouth with the yellow face for them in the water.

Since the masks represent the gods who supposedly visit the corral dancing with the personators there, the likeness should be perfect, and the personator should, in some degree at least, personify the god, carrying such emblems of power about his person as are known to be the possession of the god. Hence, the personator carries these or is decorated with them, as, for instance, the drill in the case of the Firegod, or the lashes in case of the Whipping God (*hadachíshi*). Presumably, too, the color of the mask indicates the material of which it was made, such as turquoise for blue, white shell for white, and so on. In some instances the figures on the face of the mask are emblematic of the god's power, or of his peculiarity. Thus, the lightning on the face of the Slayer of Monsters illustrates his vocation, while his garment is a covering of bows (*altqín yehaditégo sezígo*, he is clothed in a bow). The personator also carries a black stone knife (*beshdilqíl*) and a rattle (*bagháí*) of piñon (*destéfn*). The mask of the Water child is decorated with many queues to indicate the manner of tying the hair (or the scalp. See War Dance). His body is clothed in queues (*tsiyél yehaditégo sezígo*), while his knife is made of blue flint (*besht dotlízhi bibézh*)

and his rattle (*bagbál*) of juniper (*gäd*). Both queue and bow are left open lest the operator lose his eyesight (*chöhöft' do-aqfidzöda*, the line of the outlet is not drawn together). Other masks require similar additional paraphernalia, which are added to the mask when actually in use. And, whereas, the gods remove these masks upon returning to their homes, the decorations of furs, feathers, spruce or drawings are in every instance removed from the mask before being replaced into the pouch. As much time, labor and expense is required in the construction of a new set of masks the old ones are preserved as much as possible, and few of the living singers of the tribe are conversant with the required ritual prescriptions for their manufacture.

These masks usually figure in the night chant unless the public exhibition is to be omitted. In the mountain chant the various groups of dancers perform masked or unmasked in a free for all exhibition. The feather chant (*atsösi*) requires the Talking God (*hashchéltqii*) and the Water Sprinkler (*tqónenfli*), the latter carrying a large olla on his back. They dance within the hogan. The Talking God insists upon a corncake (*alkhäd*), which must be baked for him and his companion before he commences to dance.

In the coyote dance, which is now extinct, three personators of Talking God (*yéibichai*), the Fringed Mouth (*záhadolzháha*), and a Female God (*yeiba'äd*) appeared. It is said that the Fringed Mouth danced carrying a live kit-fox (*má'i dotfzhi*) in his hands. This was done inside the hogan.

Finally, at the *najéhego hatqál*, or a singing (of the night chant), the close of which is conducted inside the hogan instead of in public, the Whipping and Red Gods (*hadachfshi* and *hashchélchf*) appear in the hogan making liberal use of their lashes. The full set of masks, elaborately decorated, and differing to a great extent from those used in public, is employed then. Drawings of these could not be published here.

IMITATIONS OF THE NAVAHO MASKS.

Owing to the elaborate ritual connected with the construction of the masks and their dedication very few sets are extant. These are, therefore, disposed of only with extreme reluctance, though the courtesy of their use is readily granted to a friendly shaman. For purposes of barter, and also for prestige, imitations of the genuine masks are made of other than *ceremonial* hide. The genuine mask, however, is, for obvious reasons, preferred and sought in the public performances.

Imitations of the Navaho masks are used by the Zufi in the Shalako dance. These are made of horsehide, the mouthpieces or tubes being fitted and lengthened to further greater convenience in uttering the usual cries. The Navaho designate the Shalako as "yéinæ," the tall yei or gods. They are, moreover, freely permitted to assist in the songs, which are identical with those of the Navaho ceremonies. Indeed, it has been established that the better known ceremonies of the Navaho are reproduced on the night of the Shalako, thus the dziłkíji (mountain), tǵéji (night), yóæ (bead), hozhónæ (beauty), etc. While the Navaho language is used the accent and difference in cadence of the Zufi rendition does not efface the peculiarly Navaho origin of the chants. The yéinæ, or tall giants, who perform as dancers throughout the night have been changed or added to suit the Zufi. The uninterrupted recitation of the songs of the various Navaho chants, which is done simultaneously in several houses, is also distinctly Zufian. The fact that a month or so after the Shalako has been held, the do-igházh, or vigil, must be performed for the efficacy of the Shalako, seems again to favor its Navaho origin. In the opinion of some who have witnessed the Shalako, and from inquiries made, it appears that the Shalako originated some seventy years ago, and that the ilnáshjín (corral dance, or night chant), which the Zufi occasionally perform with imitations of Navaho masks, is of more recent date, namely, after

the return from Fort Sumner. The opinion that the Zuñi learned and borrowed from Navaho teachers is quite general.

While the Navaho are permitted to attend some of the ceremonies of the neighboring Pueblo, this is particularly true in regard to the Jemez tribe, whose shamans at times are invited to hold ceremonies over Navaho patients.

THE SACRIFICE.

The essential feature of most chants is the sacrifice (*biyáél*), which is offered to the divinities. The sacrifice consists of precious stones (q. v. *infra*), which are offered singly or in connection with the prayerstick and the tobacco. When ritual requires that the sacrificial stone be perforated (*alghádētqāl*), as with that for the Porcupine, it is fastened through this perforation to the prayerstick, otherwise it is placed upon the latter and tied. The sacrifice, like the prayerstick, is not identical at every chant, and the prescriptions governing both, with reference to kind and the manner and place of deposit, are very numerous.

The tobacco (*nátō'*) which forms part of many sacrifices ordinarily consists of wild tobacco (*dzil nátō'*). This is crumpled in the hands (*dínogish*) and placed in the hollow internode of reed (*lúká áqādítán*), the bottom of which is previously closed with feathers of small birds (*áyázh*), such as the bluebird (*dóli*) and yellowbird (*tsdiltsoí*). It is then sealed with a layer of pollen, which is inserted with an owl feather, then symbolically lighted with rock crystal (*tsághadíndfni*) and deposited near the usual habitat of the divinity. In dedicating the offering the singer invokes the divinity by its sacred name (see *Sacred Names of Animals*). The names of the various tobaccos often indicate to whom they are offered.

debé nátō', bighorn tobacco (*Oxytropis*), is offered to the Bighorn at the night chant; *dlú'i nátō'*, ermine or weasel tobacco, is offered there to the Ermine.

dinshé' nátō', or *diné huneshlgo binátō'*, tobacco for alarmed

persons, which is also called *jádi náťó'*, antelope tobacco (*Lygo-desmia rostrata*), is offered to the Antelope at the corral chant (*nídzíji*).

The bead chant tobacco (*yóíji náťó'*) consists of *dzíł náťó'* *tsós*, catchfly; *shásh náťó'*, bear tobacco (*Tribulus maximus*); *náťó' wá'l*, (*Psoralea tenuiflora*); *tłísh náťó'*, snake tobacco, and *atsá náťó'*, eagle tobacco (*Gilia longiflora*).

The *ajłlé díhilyé'*, or smoke for lewdness, which is performed at the coyote chant (*má'iji*), consists of the following: *náťó' nłchín*, (*Castilleja minor*); *debé náťó'*, *jádi náťó'*, *tłísh náťó'*, *dlú'i náťó'*, *atsá náťó'*, mentioned previously; *bí' náťó'*, deer tobacco; *debé kú hálchín*, the seed with the odor of the bighorn; *ájá' kú hálchín*, the seed with the odor of the ear; *dzíłkhéłchín*, odor of youth; *jłkhéłchín*, odor of maidenhood; *dínás* and *dínás-tso* (?); *debé haicłídi*, scratching for the bighorn; *tłó'dé nayłzi*, (*Amaranthus albus*); *qósh bėldéhi*, groundsel; *tsėdídė*, four-o'clock; *khłtsóitso*, (*Bigelovia albicaulis*); *hazłálé' tso* (?); *błna-átóí*, (*Eriogonum*); *tsiyánłchín*, pigweed, and *ayán ilághái* (?). These are crushed with the fingers, thoroughly mixed (*altqá-násdzíd*), and to insure effect, the secretions of the eyes of the elk and bighorn (*dzė* and *debé tsétqá' bináyanłchín*) must be added. A pipe (*náťóetsė*) is filled with this mixture and lighted with punk made of corn-cob pith (*dáátėín*). The pipe is stemless, conical in shape, and provided with a hole in the bottom to draw the smoke. When necessary they are made of clay mixed with crushed broken pottery, though frequently pipes found in old ruins are made to answer. The singer smokes this pipe facing east, and blows the smoke first downward to the earth; then to the sky, in front of himself, to his right, rear and left side, and finally from above downward. This is repeated in turn by the patient and all present.

náťó' niyél łshłł, I have made your sacrifice (of tobacco).

dłhishłé, I make a cigarette (sacrifice).

náťóetsė bídłhishłé, I fill the (ceremonial) pipe with tobacco.

THE PRAYERSTICK.

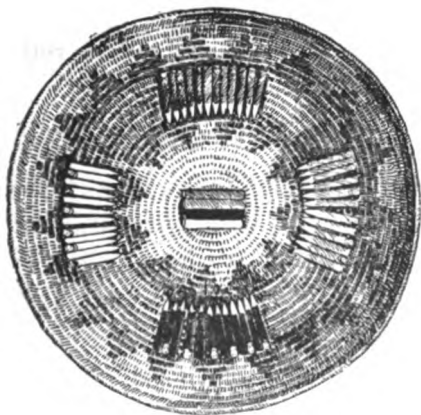
Small sticks, varying in size and color, are offered with the sacrifice and dedicated by prayer, which possibly accounts for the name, *prayerstick*, though the word *ketān* is not interpreted that way. Some prayersticks are the width or length of three finger-tips (*tqā bikē*), some of four; others are the length of the second joint of the little finger, or the span from the bent index finger to the tip of the thumb, and so on. They are colored dark (*dīqīl*), white, yellow, blue, black, spotted (*hkhfzh*), brown (*dīnlzhfn*), red mixed with black (*hchf*), or gray and glossy (*disós*). Some are decorated with rings about the neck, others with zigzag lines on the body of the stick; some with cords of divers colors wound about them in the ritual manner (sunwise), and the reverse (*shadā'ji bikéstqī*); still others require an ornament like the arrow-point (*bés'ěstūgi*), or something similar. The *ketān* for the Sun, for instance, is made of cane reed colored blue (*lūkātso dotfīsh*), that of the Moon of cane reed colored white, that of the bullsnake or copperhead (*tīstso*) of cane reed colored dark (*lūkātso dīqīl*), while the so-called track snake (*tīsh dōntī'*), which encircles many sand paintings, requires none at all.

Very few ceremonies, such as the *hozhōji*, or renewal, and parts of the *hochōji*, or witch chant, etc., do not require the prayerstick, while in others, as in the night, mountain, lighting, and other chants, they are very numerous, and are made anew for each occasion. The material to be used in their preparation is minutely described by ritual and tradition. Thus, the hollow internodes of the reed figure largely when tobacco, pollen and feathers are to be inserted and lighted symbolically, or the prayerstick is made of mountain mahogany (*tséēsdāzi*), wild cherry (*mā'idā*), juniper (*gād*), willow (*kai*), cherry woods (*dzīdzē*), etc., which are cut in various sizes according to prescription, and usually in pairs of two, one of

which is thicker, and represents the male, while the thinner is at times, though not always, provided with a facet decorated with eyes and mouth to represent the female divinity. These are designated according to the divinity they represent, as the prayerstick of the badger, porcupine, sun, moon, earth or sky, and subsequently placed in some convenient and secluded spot where it may easily be found by the divinity.

When a singer conducts two ceremonies succeeding each other at short intervals, he usually makes a slight change in the order of the prayersticks, substituting one for another, or omitting a less significant one.

Sixteen prayersticks are laid in groups of four each in the ceremonial or sacrificial basket at the night chant, of which four



Sacrificial Basket.

are held in the hand by the four *atsá*, or leading and initial dancers, while the remaining twelve represent the offering of the patient. In the event of two patients these twelve are divided between their two baskets giving each basket six prayersticks.

A number of prayersticks are occasionally specified and paid for by some patients, and are consequently not prescribed at every night chant. They number twenty-two (which is doubled

when there are two patients) and are tied together in one roll. From their number they are known as *ketá łni*, many prayersticks.

ketáshchfn is a sample roll of prayersticks which is kept by some singers to aid in the making of the various prayersticks for the chants, or certain parts of the chants requiring special prayersticks, and tracing the order in which they should follow. Not every singer is possessed of the sample roll as most of them rely upon memory in preparing and ordering them.

Ketán, the prayerstick, or internode of reed. Some suggest *kātán*, small arrow; others, *yíłaketán*, the reed joint placed in the hand.

tšá' bená'infigi, the sacrificial basket (in which the prayersticks are grouped).

Ketá łni, many prayersticks.

Ketáshchfn, roll of prayersticks, sample roll.

THE SAND PAINTING.

Every chant may be said to have its own peculiar sand paintings, or drawings on sand, which represent the divinity or some event in their lives as related in the legends. They are called *ikhá*, the entry, or they (the gods) enter and go. Originally, these drawings were made by the gods themselves upon spreads designated as *naskhá*, a sewing, implying that the effigy was stitched upon some kind of fabric. Of these, five are mentioned: the *naskhá*, or *díłqł naskhá*, the dark spread; *keeshchí naskhá*, the red spotted spread; *khín dsísgaf naskhá*, the white house spread; *natá sís lágaf*, the white feather belt, and *natá naskhá*, the feather spread, the latter two of which were in the form of a belt. These were spread out for the ceremony, after which they were rolled up and carried to their homes by the divinities. To-day the drawing is made upon a layer of clean sand which is carried in blankets into the hogan and spread out there.

The colors are obtained with crushed sandstone, charcoal,

gypsum, etc. (see Colors). The labor entailed is not performed by the shaman but by assistants under his direction. The heads of the figures are pointed to the doorway, or east, from where the gods supposedly enter. Hence, too, the footprints and trails made of colored sand and leading to the head correspond to footprints coming from that direction. The body (bitsís) of the figures is usually an oblong square terminating in a loin-cloth (tłákhál), which covers the lower body, and is decorated with such ornaments as the legends require. The dress (bi'ê or behădît'êi), of various descriptions, like dark arrow-points, lightnings, etc., is represented in the corresponding colors. When completed the patient leaves his place on the northwest side of the fire, walks around the latter to the south side, steps into the footprints and seats himself upon the drawing facing its head, or the east. Appropriate songs and prayers are then rendered, after which the patient returns to his place in the reversed order. The drawing is then erased and the sand carried out in blankets.

For local afflictions, and as a mark of reverence, many apply the corresponding parts of the figure to the afflicted parts by *inhaling the breath* of the drawing.

An instance of a tabooed sand painting is found in the bead chant and the drawing of the eagles, whose claws are omitted and substituted by kôs ishchfn, cloud effect, whenever the drawing is made during the summer months.

POLLEN.

tqădidfn, pollen, is chiefly supplied by cornmeal, and is carried in small buckskin pouches. Sacred stones, such as rock crystal, turquoise, and the like, and sometimes animal fetiches, are enclosed with the pollen. The eating of pollen occurs very frequently during the ceremonies. After taking a pinch of it from the pouch one blows toward the smoke-hole, and places the pollen on the tongue and



head. The singer, patient, and all present, starting from east to south, west and north, participate in the order mentioned. Pollen is sprinkled on the masks, the rattles, and other paraphernalia, on the bath, and so on. Pollen is used also outside of a ceremony, and singers sprinkle it upon one another when meeting.

Pollen is also called *ā'nānogād* (*bāndanegād*), shaken off, after a live bird has been immersed into it and released.

Sometimes it is also mentioned as *aqādīdīn*, pollen, or *tqēl aqādīdīn*, flag pollen; *tqo baqādīdīn*, water pollen.

Pollen is also gathered from plants and trees. *tqēl bitqādīdīn*, flag pollen; *tsīn bitqādīdīn*, piñon pollen; *tqādīdī dotfīsh*, larkspur; *tqādīdī dotfīsh altālsigi*, harebell; *chfīlchīn bitqādīdīn*, sumac pollen, etc.

Other preparations may also be regarded as pollen. *yā'nāni-ghād*, powdered dust from places where the deer, antelope, big-horn, etc., have stood; *bizānastān*, mouth-crust, or hardened spittle of these animals; *bināyānlchīn*, the eye-crust, taken from the crust in their eye-sockets; *azhāzhi nashchīn* (?); *dā' tqō*, dew, taken from plants (*nansé*).

tqōlanashchīn, mixed waters, is used for similar purposes as pollen. Originally, these waters were gathered at *natsīs'ān* (*alchīn*, the product of), Navaho Mountains; *dōkoōshīd*, San Francisco Mountains; *debéntsa*, San Juan Range; *tsīsnajīni*, Pelado Peak; *tsódzil*, Mount Taylor; *tqówhūl*, Taos; *tqóaqædlf'*, river forks in the south, and from waters in the west and north; from *āshf'*, the salt lakes below Zúñi, or rather from the springs at *dzil bá'ād*, the female mountain, and *bakhá' dzil*, the male mountain, at the salt lakes. To this was added, *tqaltfāhatān*, clay from the bottom of water; *tqādīdīn*, pollen; *tqo bitqādīdīn*, water pollen, and *tqēl bitqādīdīn*, flag pollen.

Placed in jars, this mixture was planted on the east side of the pueblo by the early *khīs'āni*, cliff dwellers, or Pueblo Indians, and may be found there by digging. *tqōlanashchīn*, or water mixed with that of the ocean, and *tqobiyāzh*, the child of water,

taken from the east, is also called *sizáziyé bitqó*, the water of the *sizázi*, by which name the early cliff dwellers, or Pueblo, designated themselves.

Another version is offered by Dr Matthews' *Legends*, page 223, stating that the mixture consists of spring, snow and hail waters, in addition to water taken from the four cardinal points. This is a wide-spread opinion.

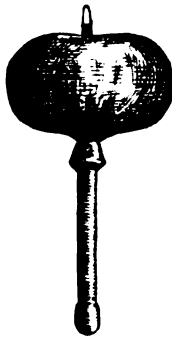
tqo bizhf', the foam of water; *tqobideshchf* (*bitēshchf*), water ashes, are also used after the manner of pollen. (See *Masks for Sacred Water*.)

THE RATTLE AND DRUM.

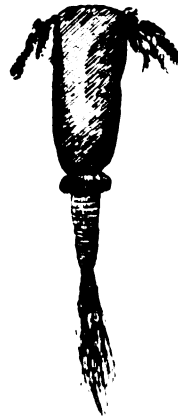
As an accompaniment to song many chants require a rattle (*aghál*). Thus, the mountain and witch chants employ a buffalo hide rattle (*ayáni aghál*); the *hózhónæ* (beauty chant) requires the



Hoof Rattle.



Gourd Rattle.



Hide Rattle.

badger hide rattle (*nahashchíd aghál*); the knife chant (*béshe*) a hoof rattle (*akhéshgā aghál*), which is made of hoofs of the deer, antelope, bighorn, etc., while the big star chant (*sótsoji*) employs both the rawhide and gourd rattles. The night chant, with the various branches of the wind chants, and the water (*tqóæ*), Big God and feather (*atsósiji*) chants, all employ the gourd rattle

(*āde aghāl*). Other chants, with the exception of the blessing (*hozhōji*), bead and feather shaft (*khási*) chants, use the rawhide rattle (*akhāl aghāl*).

The hide for the rattle is shaped and sewed when moist, and the handle is platted of the same material as the rattle. (For decorations see "Use of Animals in Ceremony" *infra*.) Small pebbles of white shell, turquoise, abalone, cannelcoal and red-white stone are inserted to produce a rattling sound. The gourd rattle is made of a hollow gourd with a stick attached for a handle. It is decorated with figures of the sun, moon, or some constellation.

At the close of some ceremonies, or when the close terminates in public exhibitions from the fifth night until the finish, the rattle is accompanied by the drum. The drum is the basket turned down which is beaten with a drumstick made of plaited yucca (see Basketry). Tradition also mentions the use of a notched stick which was drawn over the basket instead of the present drumstick. The drum is not part of the medicine bag (*jīsh*) but is furnished by the patient. The bead, witch and star chants, as well as all one night ceremonies, dispense with the use of the drum.

tsā yāsētqā (the basket is turned down), the drum; *tsā dēg nīdē*, or *dēg sētqā*, the basket is thrown up, implying that the ceremony has been abruptly closed. The singer at times resorts to this measure to enforce discipline.

MISCELLANEOUS PARAPHERNALIA.

The following is a descriptive list of various paraphernalia which form part of the medicine bag (*jīsh*) of various chants.

EQUIPMENT OF CHANTS.

The term *zā'nīl* (equipment of chants) literally means that which is put into the mouth, or taken internally, but ordinarily designates all that is required by a given chant in the shape of

medicinal herbs, clays, animal tissues, liniments, feathers, and the like, which the singer carries in the small medicine pouches (azé jîsh). The make-up of this equipment varies with each chant, and as several equipments are at times carried in the same medicine bag (jîsh), the various azé jîsh, or medicine pouches, required for a given chant are usually tied together and marked in some way to better identify them. Collectively they are then known as zá'nîl, or the medical equipment of the chant in which they are to be used.

yôæ zá'nîl, or yói hatqâl zá'nîl, the equipment of the bead chant. This consists of various tissues of sacred animals, as the bear, deer, antelope, bighorn, mountain lion, wolf, etc., which are dried and mixed, hence, ajé nashchfn, mixed lung tissue; átsó nashchfn, mixed tongues; aghás nashchfn, dried and mixed tissue of the gullet of these animals; also powdered atsá azé, aster, and atsá azé nashchfn, aster mixed with animal tissue; finally, beétsós, or atsázöl, the whistle, to imitate the cry of the eagle and hawk. The whistle identifies the entire equipment.

ináji, or béshe zá'nîl, equipment of the life or knife chant, contains: azé lichf, red medicine; lé azé, *Eriogonum alatum*; azé hajñi, gromwell; ayán ilaghái, an unidentified herb, which is mixed with jáábáni, bat feathers. To this is added the tsé dinsé, the growing stone.

dzilkkji zá'nîl, the equipment of the mountain chant, may be identified by the bear-claw attached to it, and should contain: tqēl bitqádîdin, cat-tail flag pollen; sháshdá, bear food; lichfi, red bush; azé lichf, red medicine; má'idá, wild cherry, and others. Another equipment is designated as dzilkkji ashdlá tē hatqâl zá'nîl, the equipment for the five night mountain chant, which requires nadálgaiká, meal of white corn, in addition to the herbs already mentioned.

nátóye diyñkēgo hatqâl zá'nîl, the equipment of the arrow shooting chant, may be identified by yō dijóli, an olivella shell, fastened to it, and should contain khétlō, liniment, and ntffs,

precious stones. Also, létsoi, brimstone; lējfn, coal; tēshchf, red clay; ādishtfsh, soft turquoise, all of which are required for sand paintings and for coloring numerous prayer-twigs.

hochōji zā'nll, equipment of the witchcraft chant, includes: tō' nchfn, pennyroyal; tēshchf, red clay; tqāddīn, corn pollen, shaken from live birds; tsāghadīndfni, rock crystal; f'nītēsh, lightning-struck ashes, and numerous others.

mā'iji zā'nll, the equipment of the coyote chant, requires mā'idā, wild cherry; mā'iji azē and mā'iji khētlō, coyote medicine and liniment, both of which are made of various herbs, and ajāi, dried lung tissue of the sheep.

anāji zā'nll, or the yéi hastqfnikē zā'nll, the equipment of the war dance, requires nā'ōli, beans; tō' nchfn, pennyroyal; chīl bō'os'nī, herbs gathered near a tree struck by lightning; f'nītēsh, charcoal from lightning-struck tree; hazaīldā, squirrel food, and létsoi, brimstone, tēshchf, red clay, and dlēsh, almogen, for spotting the body of the patient.

LINIMENT.

The word khētlō (liniment) is probably derived from khē štlō, the foot is rubbed, inasmuch as, in accordance with the general law of butts and tips, the liniment is first applied to the feet, and then upward to the prominent parts of the patient's body. With the exception of the hozhōji, or rite of blessing, each chant requires a specific liniment which, therefor, forms part of the equipment (zā'nll) of the chant. The dried leaves of the herbs used as liniment are slightly crushed between the fingers, added to a bowl of water and stirred. In accord with the text of given songs the singer then takes a pinch of the liniment between his fingers and rubs the patient's body with it in the following order: the soles, the instep, the shins, the knees, the sides, the abdomen, the chest, the right arm from the shoulder down, the hands, the back, the left shoulder, arm and hand, and the sides, the back, the front and the top of the head. Thereafter, the patient tastes

of it at times, and bathes his entire body with the remnants, commencing and finishing the bath in the same ritual manner. Occasionally such as attend the ceremony apply the liniment to themselves in the same manner as the patient, and in turn bathe their children. The supply is then usually increased by the addition of more water. As a rule, however, the liniment is applied only to the patient.

Some herbs, designated as *khætłö*, may be used indiscriminately at any chant which requires the appearance of the masked personators, *yéi dahulóni*, as at the mountain, night, bead and Big God chants. Others require specific herbs, which are then designated as the *khætłö* of that chant, though frequently, and especially in the progress of the chant, this designation is dropped and the herb is merely referred to as *khætłö*, a liniment.

tłéji khætłö, the night chant liniment, consists of *chölchín*, phlox; *bilhāzhchí'*, thoroughwort; *tqölchín*, a water plant; *azé ndōfēzhi*, horsemint; *tqakhāsákhād*, mouse ear; *hastqúí tsíyáel*, prairie clover, and *tsétqá' sákhádi*, *Tellima tenella*, some of which are used also at other chants mentioned above.

yóæ khætłö, liniment for the bead chant, consists of *tłó'dē nayízi*, tumbleweed, which is mixed with *atsá azé*, eagle medicine, and *atsánlchín*, aster. These are used externally only.

chíshi bínlchíji khætłö, the liniment of the Chiricahua wind chant, requires *tsághánlchí'*, *Pectis angustifolia*.

hastsetso hatqál khætłö, the liniment for the Big God chant, requires *átá tso*, big leaves, and *átá tsós*, slender leaves, two unidentified herbs.

dzilłíji khætłö, liniment for the mountain chant, includes *chí halchín* (unidentified), and *tsíyánlchín*, or *tsíyá tłó'déi*, a pigweed.

anáji khætłö, liniment for the war dance, consists of *tsábi*, wild sunflower, in addition to *kí*, sumac, and *dá'tsa*, mistletoe.

MEDICINE.

It has already been pointed out that sickness is primarily due to the magic influence of some divine power, and that the chants have been ordained for its removal. Hence, all features of a chant, such as the prayers, prayersticks, baths, wreaths, hoops, and the like, may be considered as integral parts of a remedy, insomuch as some medicines can not be *made* without them. However, as the term *azé* (medicine) is usually not applied in this general way, the present chapter is devoted only to such herbs as are distinctly set aside as medicinal by the chants, each of which, with the possible exception of the *hozhôji*, rite of blessing in some of its features, is in possession of a specific medicine for given diseases. This medicine may not prove effective in every instance, insomuch as the source of disease has not been properly traced, when a second medicine, found in another chant, becomes imperative, a process which is repeated until the source has been correctly traced and the medicine will, of necessity, prove effective.

As the medicines vary in number and quality for each chant, they are put up in small pouches called *azé jîsh*, medicine pouches, and added to the *zá'nîl*, equipment. The singer conducting a ceremony is always cognizant of the requisite medicines, which he collects in due season, while the ordinary Navaho is familiar with many from hearsay. The dried leaves, or powdered herbs, are usually soaked in a bowl of water, which in turn is dedicated in one way or other by prayer and song. At times roughly chipped arrow-points (*bés'ěstügi*), of the color corresponding with that of the cardinal points, are dropped into the bowl from the four directions. The bull-roarer, too, is dipped into it, while the thong attached to it is soaked with the medicine previous to whirling it. These and similar objects, like the thunder arrow (*f'nî' biká'*), with which the medicines are put in touch, presumably add to their efficacy.

The medicine is frequently prepared in a special vessel set aside for this purpose and called *azé bēidlá*, the medicine cup. This cup is sometimes made of tortoise shell (*tsistqéi*), or of a gourd (*adé*), or, an ordinary earthen bowl (*lētšá'*) is used. In these the medicine is stirred with the fingers, or with a feather, and administered directly from the cup or bowl. Usually the singer sips of it before offering it to the patient. At times the medicine is not taken internally, but sputtered over the patient in the usual ritual manner, a process extended also to the paraphernalia in use.

Medicine spoons (*azé dādítqí*), too, are used. In the *béshe*, or knife chant, for instance, the medicine is administered by means of two spoons, called the smooth stick (*gísh dílkhó*), and the fledged stick (*gísh íst'án*). These are



*Tortoise Shell
Medicine Cup.*



*Gourd
Medicine Cup.*



Medicine Spoons.

about a foot in length, and are made of mountain mahogany (*tséésdāzi*), which is wound with yarn, sheep wool or calico. The smooth stick is decorated with olivella shell (*yō dijóli*), the fledged stick with flint points (*bés'ést'úgi*), and both are adorned with plumes of the gray eagle (*átsáyāi*). The smooth stick is so called from its smooth surface and blunt point, to distinguish it from the other which is slightly hollowed or flattened at the point. These spoons are placed and held parallelly over the medicine cup when the medicine is given to the patient.

The same chant also requires the two crane bills (*dēldá'*), of which one is slightly curved and represents the male crane, while the beak of the female is straight. The dressing (*behadíťé'*)

of the male consists of flint or arrow-points secured with a buckskin wrap, that of the female of olivella shell (yō dasdŋsi, yō dŋjōli). The butt ends are fledged with plumes of the gray eagle (ātsāyāi). The interior of the wrap is filled with various medicines, such as azē lichf and azē hájŋ, inserted in a piece of reed (lŋkā'). This dressing of the crane bills is done at a special ceremony which is very rarely performed as few of the living singers are familiar with the prayers. Hence, allowance is made for a scarcity of crane bills, so that one of the sandhill crane (dēl), with that of the twigbill crane (tqōjŋolnā'), or the blue heron (tqāltfā'halé'), may be employed, if bills of the male and female sandhill crane can not be had. The illustration shows a female sandhill crane bill in male attire, while the curved bill is that of a blue heron in female attire. In the progress of the chant they are placed before the patient together with the charm, the medicine cup and the two medicine spoons, whereupon the patient recites verbatim with the singer the chŋshoyatqōi, or prayer to the gods.



Crane Bills.

A partial list of medicines is herewith given.

tŋēji azē, medicine for the night chant, consists of tqāholchōshi, rattleweed; azē lādiltēhi, rockcress, and others.

dzŋlkfji azē, medicine for the mountain chant, consists, among others, of chŋl na'ātŋōi, virginia creeper.

anáji azé, medicine for the war dance, is made up of gād ni'éli, red cedar; hazéiltéé', yarrow; nishchí bitá, pifon leaves, and tqázhilchín, meadow rue, which are taken internally, while hazáildái, a grass, with tló' níchín, pennyroyal, are chewed and sputtered upon the patient (já'álgó benáhozhnyól).

náátóyē azé, medicine for the lightning chants, varies with the several branches of this chant. azé bá'áde, lupine, and azé bá'áde tso, rattleweed, are used in the náátóyē ba'áji, the chant of female shooters; azé bakhá'é and azé bakhá'é tso, both male medicines, are used in the náátóyē bakháji, chant of the male shooters, while dzilkkíji náátóyē hatqál be azé, or medicine for the mountain chant of arrow shooting, consists of azé qá'ogísi (azé alkésgísi) and azé qá'ogísi ntsáigi, *Eriogona*.

wolachíji azé (wölächí bohochóji azé), medicine for ant witchcraft, requires woláchídá, an *Eriogonum*, and bis ndóchí, *Eriogonum fasciculatum*, with bis ndóchí bá'áde, *Eriogonum microthecum*, both of which are previously boiled.

má'iji azé, medicine for the coyote chant, is also called ajíhi azé, or medicine for lewd men and women. azé níchín, peppermint; má'istqéi, a greasewood; má'idá, wild cherry, and others, are mentioned as má'iji azé.

hochóji azé, medicine for the witchcraft chant, are too numerous to mention, the list comprising parts of most of the indigenous plants and trees, which are used in one way or other at the numerous branches of this chant.

It is, of course, impossible to enter here into the details of every article used at the numerous ceremonies. Some few have therefor been selected at random and are grouped under separate titles. Allied subjects, as the law of butts and tips, the pressing of the limbs, legerdemain, and others, are also treated here.

SACRED CLAY AND PRECIOUS STONES.—Clays, animal tissues used as grease, and precious stones, are usually assigned to the equipment (zá'níí) and are wrapped in small pouches of buckskin

or cloth and then designated according to their contents. Such are: *tqáltfáhaʔá*, clay taken from some sacred spring, for instance, one near salt lake below Zúñi; *dlēsh*, almozon or white clay gathered at some sacred locality; *nā sēlá*, a clay gathered at this sacred spot (probably the vicinity of Pueblo Bonito); *áshíʔ*, salt from one of several salt lakes; *chíʔ*, reddle or red clay; *dzíllēsh*, dust from the sacred mountains; *dáákēdi lēsh*, dirt from the field, which is not sacred but used as an absorbent when ritual prescribes emesis.

Clay mixed with grease, or at least an ingredient of sacred animal tissue, is largely used in daubing and painting the body of the patient. This sacred tallow or grease is called *tláʔ nashchín*, mixed grease or tallow. (Cf. also *Equipment of the bead chant.*) *atsáshjish nashchín*, dried liver-bag mixture, is used in pulmonary troubles. The bull-roarer and thong, and the hide rattle, is frequently rubbed with sacred tallow. (Compare also *Masks, the War Dance, the Moccasin Game, and Colors.*)

By *ntfís*, hard goods, such stones as *yólgaí*, white shell; *dotfízhí*, turquoise; *díchfí*, abalone shell, and *báshzhíni*, obsidian or cannelcoal, are ordinarily meant, though sometimes *tsēlchfí*, red-white stone, is also included. Other precious stones are *tsághadíndfíni*, rock crystal; *tqádsísʔéli*, pearl; *yō dasdfísi*, or *yō díjólí*, olivella shell; *ntfís altqásʔaf*, or *ntfís nashchín*, a mixture of vari-colored stones.

Precious stones are frequently employed in connection with the prayerstick as a sacrifice, though many sacrifices are made of precious stones only. As a stone is assigned to each cardinal point, color frequently represents the stones, for instance, in the figures of sand paintings, where the garments and paraphernalia are drawn in colored sand instead of the original white shell, turquoise, etc. Rock crystal is largely employed in tracing incisions, in divination (*destʔí*, star reading), for symbolic lighting of sacrificial smoke, as a charm, and otherwise.

A small pouch, about the length of the middle finger, called *azé*, medicine, or *dzíllēzh*, sacred mountain dust, is held in

the hand during the recital of legends pertaining to the hozhōji, or rite of blessing, as well as during the numerous performances of vigils (do-ighāzh) of this rite. It consists of five wraps or bags of sacred buckskin (dokākēi) into which precious stones and rock crystal are inserted or sewed, together with dust gathered from the various sacred mountains. The five bags are then wrapped with sacred buckskin. The vigils can not be conducted properly without this pouch.

nāyēnezghāni bibēsh, the knife of the Slayer of Enemies, which is variously called qāl, the club, or besh, the knife, or bēshqāl, club-knife, is an oblong, flat stone with a slightly beveled, blunt edge, and is used by the personators of the Slayer and of the Water child (tqōbajishchfni) in unraveling and cutting, as well as in the pressing of the limbs. It is the symbol of these two gods.



Knife.

CHARMS.—The charm, eltłō (it is fastened), consists of feathers (atśōs), arrow-points (bēs'ēstūgi), turquoise (dotłzhi), olivella shell (yō dijōli), and the like objects, which are secured to a forelock of the patient in the course of some ceremonies. By some they are worn even after the ceremony, when the charm is designated as diyfn beqūēholdilzfn eltłō, or a mark indicative of a holy rite. According to ritual, small arrow-points (bēs'ēstūgi), to be worn as a charm, must have been unearthed by a gopher. Similar regulations govern the use of other objects as charms.

PRESSING OF THE LIMBS.—The pressing of the limbs is performed at many ceremonies and with various objects. As the text of the song may require, the object is pressed in succession to the soles, the instep, the fibula and ulna, the knee, the femur, abdomen and chest of the patient; thence to the right shoulder, arm and elbow, the top and palm of the right hand, and back to the right shoulder again; from here to the back, thence to the left shoulder, arm and elbow, the top and palm of the left hand, and back again to the left shoulder; finally it is pressed to the

side, front, rear and top of the patient's head, after which the singer or assistant concludes by making a pass with the object across the patient's mouth, from right to left, and *vice versa*. Objects used in pressing are the arrow-points, the knife of the Slayer, the bull-roarer, herbs employed for dressing (čhíl é), and others. After each pressure the singer or assistant raises the object toward the smoke-hole (čhíláyí') and blows upon it (yéyól, he blows it away). In the witch chant (hochóji) a crow feather is dipped into the ashes of the fireplace and the ashes are similarly blown through the smoke-hole by all present.

ída'istsöd, the pressing or stretching of the limbs; bés'ěstügi ída'istsöd, the pressing with the arrow-points; nída'istsöd, I press your limbs.

askás, the straightening of the limbs; askás (íkáaz, adeskás), I straighten. This is performed by women upon the maiden at the nubility ceremony much in the same manner as the pressing.

USE OF BIRDS AND ANIMALS IN CEREMONY.—qiná bitsós, live feathers, are so called because they are plucked from live eagles (atsá daqinágo). These are ordinarily meant when reference is made to the use of feathers.

atsá bitsé, tail feathers of the eagle, are also obtained from live eagles.

atsósto, the large downy eagle feathers; atsósto t'ól, the cord to which a large downy eagle feather is attached, is used in tying sacred knots.

nadzēdlózi bitsé, the tail of the roadrunner, is employed as a charm.

gágě bitsé, the tail feathers of the crow, are extensively used in the witch and other chants as a fan or brush for expelling evil spirits. The singer makes passes with them on all sides of the patient and in conformity with the text of the songs. Feathers taken from the bundle are then distributed among those present to be used in blowing off the ashes. Crow feathers are also inserted into the throat to produce emesis at some ceremonies.

gāgē nīchīni (odorous of the crow), designates the lips (*bidā'*) or beak of the crow used at the war dance (*anāji*).

dasān baghā, porcupine quills, decorate the handle of the hide rattle; *dasān bitsē*, porcupine tail, of which a particle is added to the medicine to remove the spell of the porcupine; *dasān bitēsh*, ashes of porcupine quills, are employed in coloring the patient.

nahashchīd bikhē, a badger's foot, is used in pressing the limbs; *nahashchīd bakhāgi*, badger hide, or *ayāni* and *bégashi bakhāgi*, buffalo and cow hides, are employed in making rattles, which are called respectively: *nahashchīd*, *ayāni* and *akhāi aghāi*, badger, buffalo and rawhide rattles.

tqābā'mā'i and *chā bakhāgi*, muskrat and beaver fur, with porcupine quills, decorate the base of the rattle just above its handle, while *ayāni* or *bégashi bitsē*, buffalo- or cow-tail hair, are attached to the end of the handle.

debē tsētqā' bidē, a horn of the bighorn, in which the sacred tallow or fat is preserved.

bizādīl, blood collected from the mouth of sacred animals.

aqēskē, a mixture obtained at the copulation, or from the penis of the buffalo or bat.

bī' bitsīd benāshkhād, the seam of deer sinew, for which sacred sinew (*dokākēi bitsīd*, or *bī' bitsātsīd*, *tendo Achilles*) is used.

COLLARS.—*zē deilyē*, a collar of otter skin, to which a whistle of cane-reed is attached, is used at public exhibitions of the night chant. Collars made of spruce, the skin of the yellow and kit-fox, or consisting of a large downy eagle feather, are required in the decoration of the masks. Hence: *chō' ilbā*, a spruce collar; *mā'i dotmīzhi ilbā*, kit-fox collar; *mā'itsōi ilbā*, yellow fox collar; *atsōstso bilbā*, its collar is made of a large downy eagle feather.

Some add the fur of the ermine (*dlū'i*) to the decoration of the mask.

SHOULDER-BANDS AND WRISTLETS.—*gāghāhastī'*, shoulder-bands, are made of sacred buckskin (*dokākēi*) adorned with claws

(akhéshgān, claw-footed) and arrow-points (bés'ěstūgi), and are placed over the right and left shoulder of the patient in the witch (hochōji) and lightning (nāātūye) chants. These chants also require the wrist-bands (látsin nastī'), which are placed over the wrists of the patient. They are made of the same material as the shoulder-bands, but are decorated with claws of the fore-feet (aláshgān, finger-claws).

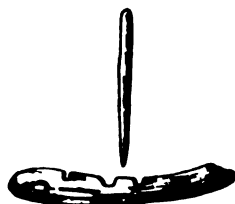
USE OF PLANTS IN CEREMONY.—In addition to the use of medicinal plants, various articles are constructed of herbs, shrubs and trees.

THE BULL-ROARER.—The prescriptions governing the construction of the bull-roarer (tsfn dī'nī, the groaning stick) are very minute in detail. It is elliptical in shape and made of pine wood riven by lightning (ndishchf bō'ōs'nī'). Its front is mounted by eyes (binā) and a mouth of turquoise (dotfīzhi), the rear by a piece of abalone shell (dīchfī), to serve as its pillow (bitsfāl). The whole is then covered with yucca pitch (tsāzī bijé), lightning-struck pitch (bō'ōs'nī' bijé), and charcoal gathered from a tree struck by lightning (f'nītēsh). A thong made of bighorn or sacred buckskin is attached through a hole in the butt end around which, too, it is wound when not in use. The bull-roarer is placed in the medicine bowl and the thong is soaked with the medicine by one of the assistants. He then encircles the hogan once or twice and violently whirls the roarer, during which time all remain in silence within. Upon returning to the hogan the thong is wrapped about it, in which shape the bull-roarer is then used for pressing the limbs. The front (bitqél), indicated by the eyes and mouth, is always pressed toward the limb. Finally the patient uses the bull-roarer in blowing the ashes, instead of the crow feathers used by others.



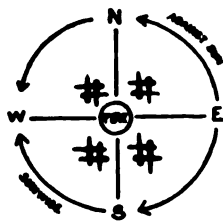
Bull-roarer.

THE FIRE-DRILL.—Flint rock (*tsétlél*) is sometimes employed in striking fire. The fire-drill (*wolká*), consisting of a tinderbox of cottonwood and a drill (*náyiz*, or *dilyízi*, the whirl; or, *hogíshi*, the drill-stick; or, *beolká*, the igniter), is at present used in igniting the fire at the fire ceremony (*achíldídljē*). Cf. Fire.



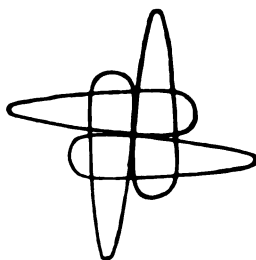
Fire-Drill.

THE POKERS, CEREMONIAL UNRAVELING OF HOOPS, ETC.—The pokers (*hóneshgíshi*), four in number, represent four bull- or copperhead snakes (*tílisto*), who lay with their heads to the fire at the cardinal points. Hence, the sticks of piñon (*destáfn*) used as pokers are hewn from branches pointing east, south, west and north, in which respective positions they are placed around the fire with their butt ends pointing to it. This is done on four successive days during the witch chant, after which they are deposited in the branches of some tree with their tips (*nosél*) pointing northward.



Fireplace.

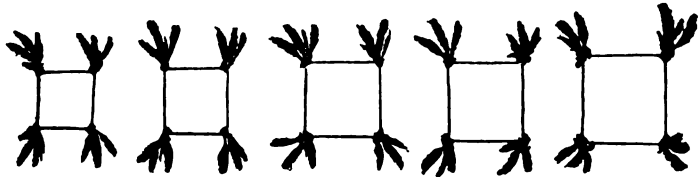
In connection with them the *yēibitsázi óltqād*, or *kákēholtqād sásl*, fireplace yucca for unraveling and stepping, are used. These, too, are four in number, and made of four wide leaves of yucca (*yei bitsázi*), intertwined in the shape of a star. One of them is placed aside of each poker, where they remain during the entire fire ceremony (*achíldídljē*), after which the patient is made to encircle the fire by stepping successively on each knot, beginning with the one in the east, and finishing at the north knot. Two of those in attendance now hop over the fire, stepping from the knot in the east to that on the west side, and from the knot on the south to that on the north side of the fire. Thereupon the singer unslips the knots and the



Yucca Star.

yucca is carried to some secluded spot.

Unraveling (*öltqád*, *wöltqád*) is done with numerous objects. Thus with the hoop (*tsábás*) made of spruce, or with small hoops (*tsábás yázhe öltqád*), which are used at the witch chant (*hochóji*). The latter are five square hoops, varying in size, and made of sumac (*kí*), chokecherry (*dzídzé*), wild cherry (*má'idá*) and scrub oak (*chéchíli*), different twigs being used for the four successive days. A bunch of grama grass (*tłó' nastqási*), sagebrush (*tsézhí'*), watercress (*tqúikhál*), dodgeweed (*táil dílysi*), and the like, is secured to the corners of each hoop by an ordinary slipknot



made with the downy feather cord (*atsótsso tłól*). The largest in size is placed about the feet of the patient, who is seated with cocked knees; the next about the knees; the third about the abdomen; the fourth about the chest; the fifth and smallest hoop encircles the head. Thereupon the singer unslips each knot, and weeds and hoops are carried out.

The wide hoops (*tsábás ntqéligi*) are larger in size, but made of the same material as the preceding, with the difference that



on each of four succeeding days one of five hoops is made of sumac, chokecherry, wild cherry, scrub oak, with the additional one of spruce. These are placed on the outside with the one of spruce next to the hogan, the others following in the order mentioned. On the first day they are lined up on the east side of

the hogan; on the following day on the south side; on the third day on the west side, and finishing the ceremony on the fourth day on the north side. Two feathers (nditqí), representing lightning (atsíntísh), are set crossing each other in front of each hoop. The patient followed by the singer pass through each hoop, which is then unraveled by the latter.

The unraveling of wreaths (chíl óltqád) is also a feature of this chant. Strips cut with a claw of the shoulder-band from wide-leafed yucca (tsázi ntqéli) are tied together (beéstíó') and then braided at intervals (bitqátá' deshbízh) with from two to nine bundles (naástaf dádijol) of weeds. The knot employed is a single twist and turn around the bundle sufficient to hold it in place. The personators of the Slayer and Water child secure a wreath each to the soles, instep, lower and upper leg of the patient; then to his hips, chest and back; one to the arms and hands, adding the final one to the forehead. The latter wreath is distinguished by two turkey feathers (tqázhi bitsé) to which an olivella shell (yó díjólí) is attached. This done, the Slayer and his Brother proceed to cut the wreaths with their knives (náyénezhāni bibézh) from foot to head, after which each single knot (bitqátá' deshbízh) is severed, and the weeds sprinkled over the patient, or, his limbs are pressed with them. Finally, the weeds are cut into small fragments and then deposited in some unfrequented spot with their tips pointing northward.

Unraveling is performed in a similar manner with the spruce dress (chō' é, or chō' bi'é), a conical shaped covering made of spruce twigs; with the dress of weeds (chíl é), a wrap made of weeds; and with the mask of yucca (nikéhe).

CEREMONIAL BATHS.—In the witch chant a bath (tqádidogís) is prepared in a basket. Two leaves of yucca (tsázi bidé, horn-leafed yucca, or tsázi tsós, slender yucca) are stirred in a basket of water by two assistants, one holding the tips of the leaves, while the other whirls the butt ends between his hands. The lather produced is sprinkled with a line of pollen from north to

south, then crossed by a line from west to east, from which point the singer draws a circle around the four points of the cross. Within each block of the encircled cross another smaller cross is drawn with pollen, after which the patient bathes his body. (Women conceal themselves behind a curtain held by female assistants.) Cf. also the Sudatory.

INCENSE.—Incense (*yă'dīdī'nīl*, that which is placed before the patient) consists of herbs like *ayán ilāghái* and *dahidī'ái*, mixed with bat hair (*jāābāni*), or of amber (*tsējě*), and a stone called *tsě bijékhāi*, the fumes of which are inhaled by the patient. The incense is sprinkled over live coals raked from the fire, and to facilitate inhaling a blanket is drawn over the patient.

THE LAW OF BUTTS AND TIPS.—The law of butts and tips obtains with unvarying regularity in a number of ceremonial paraphernalia. The manner in which the twigs are woven in the basket, or of applying medicines, and of pressing the limbs, the position of the figures in the sand painting, or of the eyes and mouth of the bull-roarer, are but instances of this law. With feathers, herbs and sticks, used ceremonially, this law is strictly observed, and is referred to as *nosél*, or *dinosél*, the growing part or tip of a feather or plant. Thus, the feathers are inserted with the tip extending from the seam of the mask, or from the ceremonial cigarette, and plants are employed and deposited with due reference to the tip and butt ends.

BOWS AND ARROWS.—The small bow (*altqí yāzh*) of spruce, and the arrows of pine (*ndishchfkā*) and spruce (*chō'ká*), are dispatched over the hogan at the lightning and witch chants. They are also designated as *mā'i bilndzfzi*, arrows for dispatching the coyote.

SPREADS.—The patient is always seated on a spread of buckskin or a piece of calico, upon which, too, medicines, feathers, and other paraphernalia, are deposited in the progress of a ceremony. These spreads, called *nilkhād*, or *benlikhái* (which is spread out), are given in payment to the singer after the close

of a ceremony. Both buckskin (*abáni*) and calico spreads may be used by him for the smaller medicine pouches (*azé dabizs*), or for thongs and cords to tie them singly and collectively (*jísh bídatfól*, thongs for the medicines of a chant, and *azé bídatfól*, thongs for the medicine bags). With the exception of the bag containing the sacred mountain dust (*dzíllézh bizs*), all smaller bags may be made of spreads, as: *ntíls bizs*, bag with the stones; *tqádídín bizs*, pollen bag; *átsós bizs*, wrap for the feathers, and so on.

THE MESSENGERS, LEGERDEMAIN, ETC.—*áká nínsli*, sprinklers of pollen, are the messengers sent out on the fifth day to invite singers of other rites to attend the closing exhibitions. Originally they were sent to foreign tribes also, a feature which has been discontinued long since. After sprinkling the pollen upon the head of the invited guest, the latter offered the messenger some object in token of his acceptance. As the singers to-day are invited for public entertainment, they usually carry their masks, rattles, whistles, paraphernalia (called *alfl*, magic or power), and the like, with them. Thus, at the fire dance (*dzílkji*), various legerdemain (*alfl*) was, until very recently, still in vogue; for instance, the dancing porcupine quills, the growing of the yucca or corn, bathing the hands in hot pitch, walking on cactus, production of field rats, gophers, and the like, performances to which little attention is paid at present. The illusion of swallowing the arrow is made possible by the use of a hollow sunflower stalk, into which the shaft and arrow-



Arrows for Swallowing.

point are gradually and slowly hidden. The alfl, or legerdemain, was deposited in the medicine lodge (alfl báhoghán) and women were not permitted to enter and see them. They were, therefor, covered and if, perchance, an inquisitive female was caught in the act of gazing upon them, she was forced to enter the corral and to dance, nilly willy. The disgrace attached to this chastisement effectively checked a repetition on the part of other women. Otherwise women did not perform as dancers, excepting the case of young girls who had voluntarily learned to dance.

WORDS.

atsálë, the groups of dancers entering the corral.

qiná bī ishlē, or qiná ashlē (áshhā, adeshhīl), I animate it.

ihnáshjīn, the corral (dance), or azhnídá (they move around the fire), the fire dance; iikhá, they enter; óókhaí, the dancers are now inside the corral; diné daálzhízh, they dance; women do not perform, but their parts are taken by men dressed as women.

f'ásh, the two enter, namely, the man and woman who enter the hogan at sunset of the last day of the night chant, after journeying from sunrise over a course of about a mile.

yé't'ásh, the gods appear, or kád yé't'ásh, to-day the gods appear, this is the final day (of night chant). Three masked personators, girthed with skins of kit-fox, their bodies painted with white clay (dlēsh) and charcoal (tēsh), and representing the Talking God (hashchéltqīl), the Shooting God (hashchéólt'óhi), and the Fringed Mouth (záhádolzhái), visit the neighborhood in search of contributions of coffee, flour, tobacco, and the like, for the final festivities. Being masked, the Talking God alone is permitted to make their presence known by his call of "u-u-u-hú." They do not tarry very long but move quickly from camp to camp.

bijí, the close of a ceremony; iskhágo biníljí, we close tomorrow; dí hadzi, there are four more nights of ceremony, the fifth day of a nine night ceremony.

do-igházh, the vigil, or blessing of the paraphernalia.

hatqál, a chant; hatqáli, a singer; sîn, a song; biyfn, his or its song; tšějsîn, one of the songs of the night chant.

nabaghâ, the ceremony or chant of which one has made a specialty, religious customs and beliefs, as ndahaghâigi hódinsîn (nšé), I respect the old customs and beliefs; dobił'ılfa, he disrespects and ridicules them.

â'honışhtqál (â'honftqál, â'hodfneshtqál), I begin a singing.

â'hunıtqál, the ceremony began.

qüşshâł (quńsâ', qodeshâł), or nâqunshâł (nâquńsâ', nâhodeshâł), or qodishâł (qodâsâ', qodeshâł), I invite a singer. Hence, hodaghâ' (qodeyâ', qodogâł), the ceremony is in progress; hodesâ', or nâhodisâ nšé, I return from the invitation, I have asked him to sing; nahâł (nohuniyâł), he is conducting a ceremony.

nôhunshtqál (nohúntqál, nohodeshtqál), I close the singing or ceremony; nohúntqál, the ceremony is over with; nohoghâ' (nohúniyâ, nohodogâł), or nohojıtqál (nohózhntqál, nóhozhdotqál), the ceremony is closed.

do-nadâda, no admission, or khúji do-njaghâda, no admission here.

húnsdzîn (bónesdzîn, hodfnesdzıl), I bewitch him; nínedzîn (nfnesdzîn, ndfnesdzıl), I bewitch you; hónodzîn, he bewitched him (evil eye).

sizâ'fâ, he put it into my mouth, he performed the ceremony over me; hazâotâ', he performed over him.

naâkhał, they appear, the yéibichai will take place.

nôhunshâł (nohúńsâ, nohodeshâł), I performed the ceremony in response to an invitation.

kâtsô istân, the big arrow fledged, arrow for swallowing carried by the atsâlê (dancers) at the inâshjîn, or corral dance.

SOCIOLOGY.

CIVIL ECONOMY.

Socially the Navaho are not distinguished by classes of nobles and common people. They are not subject to the rule of one chief, or to that of hereditary chiefs. Their chiefs are not chosen from one specific clan possessing such a distinction, but are taken from all clans, as socially they are all equal. And as a genuine democracy prevails the chiefs or headmen are chosen from the rank and file, holding their position by popular choice, and as long as they fill it satisfactorily.

In the earlier days the tribe was represented by twelve chiefs who, in council assembled, were subject to four spokesmen, whose eloquence and discretion entitled them to the choice. This was, moreover, in accord with the legendary organization of the lower worlds, in which a chief was assigned to the cardinal points with the priority of rank in favor of the chief of the east. There as here, all matters of importance, of war and peace, life and death, were submitted to the council of the chiefs for decision. And though some chiefs by dint of eloquence and their personality exercised such a right individually, the authority of the others, or sub-chiefs, was never impaired thereby in their various districts where they enforced the injunctions of the council.

The installation of a new chief was not accompanied by a religious ceremony, though the deposition of an unsatisfactory chief was at times followed by a feast at which the new chief was formally installed. It would seem, too, that the government

of the tribe was not, as a rule, entrusted to the singers, or medicine men, unless they showed unusual ability and peaceful dispositions. On raids and in war the singer always accompanied the party, performing the ceremonies and rites previously to as well as during and after an engagement with the enemy. And as many raiding parties often formed independently of the tribe as such, or without the knowledge of its leading headmen, it was of no infrequent occurrence that some pretentious and ambitious singer inaugurated such raids to the detriment of the tribe at large. Hence, to check such influences, the necessity was felt of filling the ranks of the chiefs with men making no profession of singing, unless they showed unusual consistency.

To-day the tribe is represented by a large number of headmen whose authority is confined within the limits of a small district. Accordingly, the more populated districts are each represented by a headman chosen by the consent of the people of his district, and approved and recognized by the other headmen of the tribe (and now generally by the agent). The headman directs, for instance, in matters pertaining to agriculture, taking out ditches, or clearing and breaking new soil. He is arbiter in matters of dispute for the people of his district, whose interest he also represents at the councils (and with the agent). In matters of importance to the tribe the headmen of the various districts convene in council. At these gatherings each headman voices his opinion, arguments are produced pro and con, until some satisfactory solution is agreed upon, which from the council is carried to the knowledge of the people at large through the headmen. (At present such gatherings occasionally take place at the agencies, and are convoked by the agent, who also safeguards the observance of law and order.) It may be said, too, that the Navaho in general cause very little disturbance. In fact, no trace of the early warlike spirit remains. The chiefs of war of earlier times have entirely disappeared. Slavery, too, as a reciprocity measure, is not upheld any longer. The slave was forced to labor for his captor by agriculture, herding, and every-

thing arduous. Female slaves were not taught the art of weaving, which was the sacred trust of Navaho women. In addition, the captor might take the life of his slave, sell or dispose of him at will, and upon the death of his master the slave was dispatched immediately after the burial was performed. This condition no longer prevails, though occasionally one hears mention made of members of other tribes who are held as slaves. There are, however, no instances on record in which a Navaho was subjected to slavery by his own tribesmen.

The custom of performing a ceremony for the benefit of the headmen has now entirely disappeared. In the early days the vigil ceremony (*do-igházh*) was held four times during the reign of a headman to protect him from misfortune and insubordination. This feature has vanished, as well as that of distinguishing the headmen by a special mark, such as a costlier robe, an arrow-point tied to the queue (*bés'éstügi beést'óni*), or an agate (*hada-huniyé'*) or feather (*atsós*) instead.

natáni, or *binantaf*, the headman; *nantá*, a speaker, spokesman.

hohóji natá, a peaceful chief, the chief in time of peace.

hashkhéji natá, a war chief, a warlike chief.

ana'ályá, reappointed, or *nābideltqí*, confirmed or reappointed to a position (modern words).

THE GENTILE SYSTEM.

The Navaho are divided into numerous clans or *gentes* forming a bond of union and relationship between members of the same clan, as well as between those of affiliated clans. The names of these clans are entirely locative or topographical, not excluding names of an apparently totemic character, such as the bear, or turkey people, since in such instances the locality in which these peoples were found was suggestive of the clan name. In fact, totemic names, or even traces of an early totemism, have not been discovered, and are flatly rejected by the Navaho. Some clans, indeed, regard certain animals, such as the bear (*shásh*),

the porcupine (*dasáni*), the bullsnake or copperhead (*tłistsó*), the weasel (*dlá'i*), and the mountain lion (*nashdúitsó*), as especial pets of their clan (*hi*, pet; *bíł*, *dałł*, their pet). Yet these were assigned to the respective clans after their creation, and have at no time been emblematic of the clan, or in any wise affected its nomenclature. Accordingly, too, the custom of emblazoning their shields or robes with clan totems, as the Navaho had occasion to observe with the Zuñi and other Pueblo tribes, never was in vogue with them, and was ever rejected as of distinctly Pueblo tradition. And the custom, too, of sparing the coyote, hawks, snakes, some species of bear, etc., has evidently no bearing on the subject, since that is done for religious reasons.

With the large number of existing clans to-day it is not at all surprising that accounts of their origin, and incidentally of their affiliation and assignment to various groups, are at great variance. The accounts of their origin are, of course, legendary, and differ with various authorities, who are often not free from the apparent desire of creating an eponymous ancestry, or rather, eponymous localities and peoples, in support of the prestige which their own clan should enjoy. And as these accounts are fitted into the numerous chant legends the confusion is by no means lessened. Still, these accounts agree on the one point, that the numerical increase of the clans is not due to a process of segmentation of existing clans, but to one of adoption of new peoples which were met in the course of the journey to the present habitat of the tribe. Accordingly, the phratry is eliminated, in fact, it is unknown to the Navaho, who makes no such distinction. Each clan, therefor, forms a separate whole, which is socially the equal of others with whom it is perchance affiliated by consanguinity or adoption. Naturally, this affiliation or relationship caused some clans to be grouped with earlier, or nuclear clans, which gives the latter occasionally a phratral distinction.

The relationship between the clans was, according to the accounts, established either by intermarriage, or by closing a friendship with new and strange tribes or clans as soon as they

met. Whenever mental derangement was subsequent to such marriages there could be no question of the prohibitive degree of consanguinity, and the necessity of intermarriage with non-related clans was once for all established. Exogamous marriages, too, were not uncommon, especially during that period in which, according to their tradition, the Navaho and Pueblo tribes lived as one, and the new clans thus formed were adopted by the husband's clan and affiliated to his group of related clans. The tribes were, of course, destroyed by the flood of Navaho tradition. A nucleus, however, of a new tribe had been saved by divine intervention, so that representatives of the original clans still remained. These formed new ties with the Pueblo and other tribes as a result of concubinage with slaves and captives, the descendants of which subsequently waxed sufficiently strong to form new clans and assert their independence of their captors. And since their relationship with clans affiliated to that of their captors is not sufficiently well established to be beyond dispute, they are numerically strong to-day owing to their limited relationship. Strangely enough, some of the post-diluvial accessions, such as the Jemez, Zia and Ute clans, coincide both in name and affiliation with the original clans adopted by the Navaho from these tribes. These latter, however, are not regarded as captive clans, like the more recent additions, as their relationship with all the clans of their group is never disputed. And, since the various bands of Pueblo refugees and captives entered the tribe at different periods, and even among the so-called ante-diluvial clans scarcely one is without historical data tracing its origin and recent progress, the original accounts are now generally embellished with modern historical data, which is usually the trust of some intelligent representative of the clan.

But, withal, the question of consanguinity is paramount in the gentile system. Though, properly speaking, there is no phratry, the nuclear, or adopting clan, often enjoys phratral distinction by choice of the sub-gentes, who sometimes refer to themselves by their phratral connection, as, for instance, the *tqodokózhi*

má'ideshgīzhnī', the Jemez of the alkaline water clan, or, the khīyā'āni shāsh dīnā'ē', the bear clan of the khīyā'āni, thus indicating their consanguinity by adoption. Double clan names, however, indicate adoption by one of the two clans, as will be seen later, and the quasi-phratral connection is therefor, as a rule, not indicated in this manner.

Among the clans four claim the distinction of originating directly from the person of esdzānādle, the Changing Woman. The khīyā'āni were created from the skin which she removed from her breast, wherefore their name is said to signify, "those made of her breast." In like manner, the honaghá'nī, or "they who were made of her back," were created from the skin which she loosened from her back, while the tqodichīni, "bitter water people," and the tqótsónī, "big water people," are so called because of their creation from the sweat (or skin) gathered from below her right and left arm respectively. Thus she formed the nucleus of the tribe to which she presented the pets above mentioned, and dispatched them to this earth. In the course of this journey they met with other holy peoples like themselves with whom they made friendship or ascertained their relationship.

But while the following list does not propose to present the clans in the order in which they may have entered the tribe, an endeavor has been made to present a reliable classification of the related clans as they exist to-day. The clan right is exercised in the first instance by the mother, hence, all her children belong to her clan. In addition, intermarriage with the clans affiliated with hers is prohibited, which prohibition also extends to the father's clan and those related to it. This prohibitive degree was formerly also extended to the whole group of the grandfather's clan, but is now generally disregarded and limited to the two groups in which the father's and mother's clan happen to be affiliated.

The various groups are indicated by roman letters preceding the nuclear, or most important clan of the group.

- I. 1. *khīyā'āni*, people formed of her breast.
 2. *tqēhogāni*, people of the white valley.
 3. *azétso dinā'é'*, big medicine people.
 4. *bitāni*, leaf people. Some derive this from *bitqātāni*, they who passed along the side of the cañon.
 5. *dziitād dinā'é'*, or *dziitāni*, at the base or lower side of the mountain people.
 6. *shāsh dinā'é'*, bear people.
 7. *tqāzhi dinā'é'*, turkey people.
 8. *nadā dinā'é'*, corn people.
 9. *khīyā'ā'*, where the houses stand (up, or on high).

- II. 10. *honaghā'ni*, the people formed of her back.
 11. *dziitā'ni*, the people at the base, or in the rincón of a mountain.
 12. *tqoqāni* (*tqoāqāni*), water is close by. (The *dziitāhodi* are now extinct, but were accredited to this group).
 13. *tqāneszā'ni*, poles strung out at the water people.
 14. *hashkāhadzōō*, where the yucca is strung out.
 15. *nīhobāni*, light-colored soil people.

- III. 16. *tqodichīni*, people of the bitter water (i. e., formed of the sweat of her right arm).
 17. *bī'bitqōni*, people of the deer water (country). The next two are assigned to the preceding clan.
 18. *tsīn sakhādni*, people at the lone tree.
 19. *tqō bazhnā'āzhi*, where two went for water.
 20. *tqō doközhi*, alkaline water.
 21. *mā'ideshgīzhi*, coyote pass, or Jemez people.
 22. *tłōgi*, fluffy, or grass-mat people, because they wove mats of grass and yucca. Later these were identical with the Zia people.

23. tséikhéi, or tséyí' khéi, twin-rock people, from pillars of rock, upon which they were wont to mount.
24. yóó, the bead people.
- IV. 25. tqótsoní, the big water people (i. e., formed of the sweat of her left arm).
26. bitá'ní, the folded arms people.
27. hashtíshní, the mud people, because they made many earthen wares.
28. tsédeshgizhní, the people at the rock pass.
29. lúka' diné'é', the reed people.
30. tsétqá'áni, the people at the monocline.
- V. 31. tqábáha, at the edge of the water, because they dwelt there.
32. haltsóí, living in the meadow.
33. kánáni, the living arrow people, because they were skilled in making arrows, and supplied all tribes with them.
34. kaí diné'é', the wil-
- low people, living at the willow grove.
35. chézhín dí'ai, the malpais trap dyke (people).
36. tsá'hiskídní, knolls covered with sagebrush.
37. má'ideshgizhní, another group of the Jemez, assigned to 31.
- VI. 38. hoghán lani, many hogans (ironically).
39. tsénahabílní, people at the overhanging ledge of rock.
40. tqóáqædlíni, at the crossing of the wa-
- ters (rivers).
41. nakhaí diné'é', the Mexican people, adopted and freed by the preceding clan.

- VII. 42. tsfnajīnī, the black streak of wood people, because they thrived on a black stalk gromwell, called azé hajīni. In addition, their country was covered with a dark soil and underbrush, which from a distance resembled a black streak against the horizon. Hence, they were known as the dark streak of wood people.
43. tīāshchī (tīāāshchī), the red lefties, because the soil of their country was a bright red, and its people strongly built, and left-handed.
44. khīn lichīnī, the people of the red houses.
45. deshchīnī, at the bend of the red rock (people).
46. tīzi lāni, many goats, but this is a modern clan, sometimes referred to as the red goats.
47. tsénahabīnī, the same as 39.
48. kǎ'ī, the willows, because they made many ketān, prayersticks, of willow, as they are made to-day.
49. tīs jābāni, at the gray cottonwoods.
50. nódā'ǎ, the Ute clan.
- VIII. 51. tqāchīnī, the people of the red soil, or country.
52. nānēshtēzhī, black across, because of their mode of cutting their hair short at the forehead, and spotting their faces with black paint. The Zufi clan.
53. khīn lichīni, same as 44. The red house people are identical with the San Juan Pueblo.
- IX. 54. tsenjīkhīnī, the people of the black houses.
55. tsenzīltsoi, those of the yellow houses, as these two holy peoples lived in dark and yellow houses. Those living in the dark

houses, or the half of the village which was dark or black, were of a dark complexion, while those living in yellow houses were light, or blond, hence the names.

56. áshfni, the salt people, or those of the place covered with salt or alkali.
57. debé lizhfní, San Felipe, a modern clan.
58. má'ideshgizhní, another group of the Jemez clan.

Various informants offer translations of the clan names which are greatly at variance. However, after consulting the works of eminent authorities on the gentile system, such as those of Dr W Matthews, A M Stephen, and of others, and comparing them with additional data obtained from representative authorities in the tribe, the present translations are thought to be fairly reliable. As was suggested previously, there are additional clans assigned to some groups, or to specific clans, whose relationship, however, is not entirely beyond dispute. Thus, the tqábáha of group V claim the nānesht'ézhi, or Zuñi, and the dziłghá, or White Mountain Apache, as relatives, in addition to such spurious clans as the na'af (na'áha), at the dip of the mountain, and the ná'asáz diné'ě', or the wanderers (cliff-dwellers). Similar clans are those descending from captives taken from the chfshi, Chiracahua Apache; nakétlá', Pima; dilzhé'ě, Mohave; áyákhíni, Hopi; báyodzín, Paiute; nashgáli diné'ě', Mescalero Apache, etc., which are fairly well distributed among the older Navaho clans. At present new clans are not added, and the distinction between slave and Navaho clans is practically nominal, as the title of the former to clanship is of long standing and well established. Yet, while the adopting clan as a rule acknowledge a tie of consanguinity with the adopted or captured clan, this is not always done by the clans affiliated to the adopting clan. Consequently, intermarriages between captive clans and those affiliated to their captor sometimes take place, yet not without

criticism from the older Navaho clans, who admit the relationship, and wish their traditions observed.

Sometimes double clan names are met with, as the *deshchfni* *bitá'ní*, or *flashchf* *bitá'ní*, which indicate that the *bitá'ní* clan adopted girls of the *deshchfni* and *flashchf* clans, whom the latter had discarded. Hence, they were *deshchfni* and *flashchf*, respectively, by birth, but *bitá'ní* by adoption. Their descendants, however, refer to themselves as belonging to the *bitá'ní*, and reject the claims of their progenitors. Accordingly, their affiliation is disputed, and they are referred to as *diné dobáhozini*, the doubtful clans, or persons of a doubtful clan. Such instances are few, however, and it is generally acknowledged that a member is added to the clan by birth only. Moreover, the clan can not now disown its members, as any effort in this direction is thwarted by the other clans.

The clan always enforces its right to its members against other clans. An instance of this may be found in a custom, which in part is still observed. Upon the death of her husband general good custom required the widow to marry his brother, or some close relative of her late husband. In the event of more than one brother she was at liberty to choose among them, which she did in the following manner: Some time after the death of her husband she made two carrying baskets (*tsízi*), one of which she filled with cornmeal (for preparing mush, *tqá'ní*), the other with paper-bread (*ášt'é*), and placed two boughs of wild grape (*dzidzé*) and redbush (*lichí*), in the form of a cross, over the whole. She then proceeded with the baskets to the hogan of the desirable party and placed them some distance from it, so that they might be gathered and their contents consumed by the family. This done she returned to her home. Subsequently, after four days, the husband-elect stripped off his garments, and taking his bow and arrows, proceeded to place them in the hogan of the widow, where he slept that night. On the following morning both washed themselves in a bowl of yucca suds, and combed one another's hair, which concluded the marriage ceremony.

Similarly, a widower carried his bow and arrows to the house of a desirable relative of his late wife, offering and concluding marriage in the same manner. But when it was thought desirable to evade this duty, as in the case of a large family, or otherwise, the clan was obliged to inform the widow, or widower, of the ineligibility of the desirable party, thus granting them liberty to choose among other clans. Moreover, this protestation must precede the formal and public request for marriage made by the widow or widower in the manner above indicated, lest the party chosen be forced to submit. (Polygamy is still permissible, polyandrisms was always avoided as adulterous.) Accordingly, the period of widowhood was extended to two years to give ample time for consideration. This period is still observed by some, though the custom of carrying the baskets and the bow and arrows has entirely disappeared. The clans also assert their traditional rights, holding the widow until she obtains her release either by marriage (and divorce) or by their consent. In the event of a refusal other clans avoid her, though such a release is at present often purchased by sexual intercourse with one or other clan relative of the deceased, after which all obligations are considered fulfilled.

For other effects of the gentile system see feuds, marriage and mortuary customs, and other articles.

In addition, it is reprehensible to marry a woman with whom one has concluded a friendly relationship by frequent visits and endearing terms (*kě jinfgo*, when one has called her friend), as this is equivalent to consanguinity with her.

WORDS.

al'á da din'ě', or *ta dānltqā'i din'ě'*, the various clans; *biké* (*bikéi*), his relatives (clansmen); *al'ké ndlf*, or *da'af din'ě'igi nlf*, the two clans are related.

qat'ish din'ě' nlf, or *dā dó ná'ě nlf*! to which clan do you belong? *ai din'ě' nshlf*, I belong to that clan, or *shi tqábâha nshlf*. I am a *tqábâha*.

shil̄ aqishdilchfn, we are of the same clan (related); yashchfni, related ascending, namely, the father's and mother's clans; nashdeshghāzh, he married back into the clan of his deceased wife (or husband); chænā'i, the privilege of doing thls; Kenjfkedi, adultery with relative or related clansman.

Kē chætqanāgis, it is impossible to disown a clan relative, or chæ ānāl'f, it is useless to turn a member out.

KINSHIP.

Navaho tribal society is based primarily upon kinship arising from clan affiliation, as each person is a member of the tribe by reason of his or her affiliation to one of the numerous gentes. This kinship is firmly established and well known to the tribe at large, and some sort of government was introduced largely to maintain the rights and reciprocal duties of kinship, as in the case of feuds and criminal offense against any clan member. The gens, or clan, thus forms one large family within the tribe, the units of which are linked together by one common parentage. Even connubial vows do not sever the bonds of consanguineal kindred arising from clan affiliation, since the clan never loses its right to one of its members.

Accordingly, too, terms which are used to designate real consanguineal kindred, such as my brother, uncle, sister or aunt, are promiscuously used in designating clan kinship as well, and incidentally indicate the social relation in regard to matrimony which these consanguineal bonds enjoin.

The present list contains the names of the lineal ascendants and descendants, which are given in the personal form. The collateral lines of brother and sister, father and mother, show many identical names and a tendency to reduce the remoteness in relationship. Neither is it customary to duplicate terms in the designation of remote relationship, though this is at times done by way of exactitude, as shizhē'ē' bizhē' bidēzhi biyāzh bits', my father's father's sister's son's daughter, instead of the generic term shināli.

Relative age is differentiated in some instances, as with the younger and older brother and sister. No special term exists to designate the first-born, or eldest child. The mother usually designates her child in terms not in use by the father.

WORDS.

shĭ, self.

shizhé'ě', or shitqá, my father.

azhé'ě', the father.

hazhé'ě', or bizhé'ě', his or her father.

shamá, my mother.

bamá, or qamá, his or her mother.

shináli, my paternal grandparents, my paternal ancestors. The entire collateral line is referred to as shináli (pl. shinálikhě), such as my granduncle or aunt, etc., though for these and remoter kindred such terms as sitsfli, my younger brother, etc., are employed.

shichaf, my maternal grandfather; shichó, my maternal grandmother, or my maternal ancestors and kindred. shináli is also used to designate this collateral line, though more frequently terms denoting closer relationship are employed, such as shidá'i, my uncle, for my mother's uncle,

or sizédi, my cousin, for my second cousin, or shidézhe, my younger sister, for my mother's aunt's daughter, etc.

shidá'i, my uncle (mother's brother).

shaká'i, my aunt (mother's sister, who is frequently addressed as shamá, my mother).

shibízhī, my uncle and aunt (paternal). shizhé'ě', my father, is also applied instead of shibízhī, my paternal uncle, much like the preceding. shináli is also applied for my father's uncle or aunt; sizédi, my father's niece, etc.

sizédi, my cousin (both male and female).

shĭnā'ash, my cousin (male). Frequently other terms are used, such as shĭnai, my brother (older than self); shidézhe, my younger sister. Second or third cousins are not especially designated, but are called sitsfli, my younger brother; shidézhe, my younger sister, respectively. Some, however,

note a distinction for the descendants of a maternal aunt, thus, *shichǎ'*, my daughter, designates my aunt's son's daughter; *shidǎ'*, my nephew, my aunt's daughter's children.

shfnai, my brother (older than self).

sitsfli, my younger brother.

shádi, my sister (older than self).

shidézhe, my younger sister.

sikís, my brother (*akís*, the brother; *hakís*, his brother), and *shilǎ'*, my sister (*halǎ'*, his sister), are employed promiscuously for younger and older brothers and sisters, respectively.

shamá yǎzhi, my niece, or specifically, my sister's daughter.

shidǎ', my nephew and niece (designating both brother's and sister's children).

shibízhí, my nephew's children.

shiyé', my son.

ayé', the son.

qayé', or *biyé'*, his son.

biyǎzh, her son, or little one, a term not employed by the father of the child.

sitsf', my daughter.

bitsf', his daughter.

shichǎ', my daughter, is used by the mother and others referring to the girl.

sitsǒf, my daughter's or son's child, grandchild.

sitsǒkhě, my grandchildren and their descendants.

tǎla haijé, who went forth together, or *dalǎf aqolchfli*, born from one, relatives, kindred. Or, interrogatively: *dǎ' tǎla hojéish ité?* or, *dǎ' dalǎf aqolchfliish ité?* are (the two) related (in any way)?

da bizhé'ě', his real father.

bizhé it'fni, his stepfather.

AFFINITY.

shāyé (*shiyé*, *shaǎyé*), my son-in-law, the same word designating also my brother- and sister-in-law.

shizhá'ád, my daughter-in-law.

shādanf, my father-in-law, or, promiscuously, also for son-in-law, as *bādanf*, his son-in-law, or, finally, for the collateral line, as *bādanf*, my wife's uncle or nephew, etc.

duish'fni (*doyish'fni*), whom I do not look upon, my mother-in-law.

WAR.

The life of the early Navaho was one of continuous war and rapine, the neighboring Pueblo and Mexican villages usually being their victims. This mode of life necessitated a constant change of domicile, and made the pursuit of native industries practically impossible, as strenuous activity in war gave way to comparative indolence in time of peace. Yet, like most of the Plains Indians, the Navaho was well inured to the vicissitudes of climate and poverty, as the warrior must needs bend all his energies on constant exercise, privation and endurance, qualities which were decisive factors in primitive warfare. This training was begun early in life. Infants were bathed in the snow for the purpose of hardening them to the constant change of climate. Boys and youths were urged to continuous exercise in running, dodging, the use of the shield and spear, in shooting, cunning, and every artifice known to the more experienced warriors. Their diet was meager, consisting wholly of corn and venison, or of esculent herbs when corn was wanting, and water to furnish the wherewith to drink.

When at leisure and peace the tribe roamed over an extensive territory, the security of which was insured to some extent by sentinels placed on guard at conspicuous elevations, whose duty it was to signal by smoke or fire. The signal given it would change its habitat, as it was preferred to avoid an encounter unless practically certain of victory. Apparently no special code of signals existed for the various neighboring tribes, and attacks were usually and preferably made upon isolated bands of enemies, or unsuspecting settlements, opportunities for which were very favorable among the scattered Pueblo.

The most experienced headman was chosen leader in an engagement, though in the heat of battle each warrior insured his own safety. An action was always begun with much clamor and a charge on horse, bringing shield and spear into play. At close range bow and arrow were effectively used, though quite frequently refuge was sought in a hasty retreat.

Raiding parties were usually formed of small bands as this method insured larger dividends to the members of the party. In war and on raids, however, the party must be joined by a singer of the war rite (*yéihastqñikě*) to celebrate the victorious deeds of the war gods, such as the Slayer of Enemies, the sun and moon, etc.

An enemy was usually scalped without previous torture, but if possible, he was made captive, as raids and war were undertaken to increase the number of slaves in one's possession. In addition, too, the moist scalp must be carried at the end of a pole, and kept some distance from the hogan until the effects of the sight of blood might be removed by the war dance (*anáji jintěsh*), after which the spear or belt was decorated with them. In the event of the death of a warrior from wounds received in actual combat, the captives made by him were killed over his grave.

Among neighboring tribes, the Utes, Apache (White Mountain), Mescalero and Comanche Indians were most dreaded enemies.

WORDS.

nashbá' (*nsébā*, *ńdeshbá'*),
I go to war, I go to raid.

hashkhěji, the war chief.

yéikě, or *yeihastqñikě*, the
war rites and songs.

yīsná', booty, a captive.

yishné' (*sélná'*, *deshnéł*), I
take booty, make a captive.

shidílné', (*sidisná'*, *shidídol-
néł*), I was made captive by
him.

hatsfzís qash'á (*qá'á*, *qadesh'-
áł*), I scalp an enemy.

tsīzís dítłé, the fresh scalp.

náltqé, a slave.

náltqé séłi, I become, or
was made a slave.

náltqé ishłé (*séłi*, *deshłéł*),
I make a slave of him, I cap-
tured him.

nál'ái ishłé (*séłi*, *deshłéł*), I
make him slave.

báyodzín ishłé, I make a
Paiute of him, reduce him to
slavery.

báyodzín, Paiute, is also
used to designate slave.

atqé'esh'í' (*ntěé*), I chastise
him (a slave).

atqñsh'í' (*ntěé*), or *atqñshłé*
(*atqñishłá*, *atqñdeshłł*), I
punish you.

atqéeshłé (*atqí'ishłá*, *atqí-
deshłł*), I chastise him.

FEUDS.

Quarrels among neighbors and members of different clans are common. An amicable settlement is often reached privately and by representative members of the disputing clans. In some instances a case may be submitted to a neutral party, as is now frequently done before the board of Indian judges established by the Department of Indian Affairs, though an unofficial settlement is much preferred.

The Navaho exact a life for a life, and in the case of a murder the relatives and clansmen of the deceased exact the penalty. Formerly this penalty was most arbitrary, the price exacted consisting of almost the entire wealth of shells, stones, earrings, hides of lynx and otter, etc., of the offending clan. Later, horses and cattle were exacted, and a penalty to the value of five and more horses for a woman, and three or four for a murdered man, was levied upon the offender. At present this crime is equalized on a similar basis or the offenders turned over to the State authorities. Still it is by no means of frequent occurrence, and the position of the wife (taken from an outside clan) is one of comparative security, which in no small degree is due to the severity with which justice is visited upon an offender. Other crimes, such as rape, adultery, deliberate slaughter, or purloining of cattle, and damage to another's property, are often the occasion of strife and contention, resulting in hard words, blows and bodily injury. Drunkenness, unless carried on habitually, is regarded lightly. Offenses given in drunkenness are not taken seriously as a rule, and damages done are repaired or paid with admirable equanimity.

For neighboring tribes, such as the Zuñi and Hopi, the Navaho cherish a sense of natural superiority in addition to a traditional contempt for the latter tribe. The American, though not equal to the Navaho in rank, is respected according to deportment, while the Mexican, with few exceptions, comes in

for a considerable share of paternalism. Together with other tribes the Navaho share a genuine contempt for the negro.

List of words and phrases bearing on subjects of dispute, arbitration and crime.

ánaqui'áhi, a judge, Indian and American.

do ál'fda (it isn't done), it is forbidden, against the law. The word law or laws has no equivalent in Navaho and is paraphrased by some such expression as this, or by words like tell, command, Washington or the agent says, etc.

sháyá'ndótfí, I'll place it before a judge or arbiter, bring it to court.

naqaásht'éyodlí, he will settle it for us.

shāāsh't'éyodlí, he will settle, arbitrate for me.

dodá dishní, I oppose it.

dodá dídoní n'té, he would have opposed.

tsfdesyís, I am frightened, alarmed.

tsí dólyis, he is alarmed.

bizé t'óóqóyüi (much mouth), he is agape, amazed, greatly surprised.

áyo hóshí, I have a suspicion, I suspect.

hayúhoshí, I suspect him of.

shayóhójóli, he suspects me.

ayúit'égo ayóholí, a very suspicious person, he looks very much askance.

bahági idáshishdoní n'fzin ayóholí, he suspects others of wishing him injury.

biyoclífd, he lies, or bioclífd, it's a lie, he lies.

algháhódétá', an argument.

do-bagháhodetáni, there is no question about it; also used for I argue.

biyoclífd beben'khāgi tqohá bādzt'é', caught in a lie the sweat ran down his face.

chígo dādāghál, he couldn't see straight.

bin'fago dāhichí (self), his face reddened, he blushed visibly.

yāhodil'té', he was arrested.

awālyā setqí, and put in jail.

bahági it'éi y'nædlí, he is bent on meanness.

bahági, or bighahági insht'é', I am mean, commit an offense, inflict injury.

qainéldsłhi, an unreasonable person.

doyá deinúzlñ, he is war-like, quarrelsome.

do-kehodóshné'téda, an implacable person.

aqldiyatf, they avoid each other, do not look at one another.

alkédł'ni, we hate each other.

aqłjólá, he hates another.

hakídłtá, he accused him of something.

olčłd, he works against another, he is jealous of him, sneaking.

akłs ačłłshdłłká', he alienated a friend.

ayđitęgo aintf, backbiting, evil speaking.

ayđitęgo dądsągi hálłf, he spreads false reports.

tđóqółłfłi hálłf, he makes up false reports.

dąbł oyłłgi tđqonłłi hálłf, his reports are his own make-up.

ąqonłł tęyá naghá (he goes only for something to happen), an agitator.

ayđitęgo atqá' nahalnf, a tale-bearer, who causes hard feelings among friends by his gossip.

ayđitęgo asęzlñ ądzłñ, he who "breaks his neck" to report something.

dótso, a gossip, tale-bearer (lit. a big fly).

dobinál hadsódzł itęda (one can not speak in his presence), untrustworthy.

do-bilhojólłf itęda, he cannot keep a secret, or confidence.

la atśá bitqél náhodłél (it takes a different front), a conflicting report or tale, ambiguous.

dahazhó má'ikę naghá, there's a sample of a coyote! untrustworthy.

kąd ę hashnf, (I'll speak or am ready to speak now), I am anxious for news.

tá bęhozłni, it is apparent, he is candid, upright.

do-shilbębóhzinda, ambiguous, doubtful, unreliable; also used for suddenly disappearing.

do člłřáda, he does not appreciate, unappreciative.

nanshtqłñ, I advise.

binántqłñ doyasłóda, the advice is foolish.

tąłgisi ntsłkhęs, he gives much thought to a subject, a deep thinker.

yíná'sād benántqín (life's words with I advise), my advice is based on experience, good advice.

bfnlnkdsil, he has nerve, backbone.

bāhozhó, agreeable in manner, or yāhoťě', agreeable; also used of being satisfactory to both disputing parties.

bāhashnī', I praise, admire him.

dōdā yækfdasetqf, he is non-committal.

bāqūfntī', he is accommodating.

do tsfł ādlil'fda, he is not hasty, but weighs the matter well. Also, he takes it easy.

aqfnsin, I agree with, am of the same opinion.

do shi'ānfda, I do not admit that.

dahadsfigi, his answer, which is used to express abiding by another's decision.

bfdiyěshťf, I am prejudiced against him.

ťafgisi beedilá, he talks or does big, a stuck up person, "too smart."

do bi'lil'fda, very arbitrary, assuming in manner.

ayúinshtě nfzín, he gives himself airs, blustering person.

boholnfigi řaigisi beedilá, a domineering person, one who "rides the high horse."

bādilčhál, a babbler, noisy, boisterous fellow.

baátě' huló, he is mean (also used of an unruly horse).

ťávisi baátě' ādín, he is kind, of an even temper.

yichī' nāóshdlī', I have a presentiment, anticipate trouble.

ťódishnī (ťó ndishnī), I merely remarked, I was fooling.

do hoťěgo ādisíntā', you misunderstood me, a misunderstanding.

bi'liqčhünsin, I inform him, acquaint him of; also, I am acquainted with.

do-joodlá'etěda, he is unreliable, a prevaricator, it looks suspicious.

shfkajlqfl, he pumped me.

béekāiyil, he pumps others, making a practice of pumping others.

akédinī, dislike, he dislikes, hates him.

biké āqidishá (go around him), I avoid him.

yə' nihish'á, I intimidate you.

nił yəhashkə, I frighten, intimidate you.

alnışhdēl, rape, I rape.

nił nışhdēl, I rape you.

yiysisqı, he killed, an assassin, a murder.

áladāhāsh'tá', I commit a crime.

adishlė, I commit adultery.

nadishlė, I commit adultery with you.

lėnsın, I am jealous of.

yāhāsın, shame.

bayānızf, ashamed, he is ashamed.

bayāznfsın, I am ashamed of myself.

kenāsh'nə (kēnādsā), I avenge, get even.

kė naasdlf, I have apologized, made friends again.

tō shılhazkbė, I am in doubt, not clear as to the course to be taken.

nish ishjėish dolá? (ishjė, pasted, glued to), do you doubt my friendship?

hozhōji jılř, he has made friends again; also, he is (now) peaceable.

kehėsdōd, straightened out, a compromise was made.

bđi'á', he is undecided.

tādo bəhozfnı, there is no clue to the deed.

yāāhalyá, he is careful, discreet.

bāāhashyá (nt'ə), I am careful.

bāaholyá, have care!

do-dāāhalyáda, he is very careless.

shfshikė (nt'ə), I don't care, it is immaterial to me!

bainėsh'tı (ba'nsfstıd, ba'ndesh'tı), I get him into trouble.

nainėsh'tı (nā'nsfstıd, nā'ndesh'tı), I make difficulties for him.

qayá' qodisqės (qayá' qodėlqız, qayá' qodidėsqıs), I run the bluff on him.

niyá' qodisqės (qodėlqız, qodidėsqıs), I run the bluff on you.

tō bāhodonı, he does not worry over it.

tō shāhodonı (nt'ə), it does not worry me.

tō bādeshnı (nt'ə), I do not worry for it.

dohalyáda, he is childish.

tō dōōhalyáda, or tō bñi ádin, he has no brains.

tō shıl qóyē, I am alarmed, frightened.

hđfshchı' (hđdışchıf, hđı-deschchıl), I coax him.

łakhán dishnf (dfnīd, łakhán dideshnf), talk sweet, sugared words; I coax, for instance, a prisoner, or horse.

łakhán didfnīł, you must use nicer language than heretofore.

yā'infī, one who arrests, the modern deputy sheriff.

khéndzīn, or kheshó'nī (nt'á), I am his friend, I asso-

ciate with him.

bizēqólē' laná nsīn, I am anxious to see him die, one who awaits with impatience the death of another.

tsīn, a club.

nánshqāl (nanéłqāl, ndfneshqāl), I strike with a club.

nánshqāl (nannéłqāl, ndfneshqāl), I beat you with a club.

SWEARING.

The Navaho swears when angry or excited, and at a turn of fortune. Abuse is heaped upon a horse, a dunce, or an intruding dog, and the like. Women are just as bristling and voluble as the men, if not more so, and use the same delicious and forceful language. As a rule, however, the child is not abused, but treated with all gentleness and utmost leniency, and the affection of some grown men and women for their parents is truly touching.

Navaho imprecations are harmless expressions and usually refer to things tabooed. Delightful imitations of American explosives are not infrequent, such as: "Ssū! Hod dem gid æ!" or, "you dan sun de bid!", though many are unaware of their meaning.

WORDS.

shāsh, shāsh (bear); tīsh, tīsh (snake); mā'i, mā'i (coyote), or similar imprecations, often precede a long line of vigorous language.

shāsh khēyadē, from the bear's den!

shāsh bakhā'i, you male bear!

shāsh bā'ād, you female bear!

shāsh baālchfni, you bear's children!

jishchádæ, disinterred!

jishchádæ má'i, you disinterred coyote!

ní', added to the name or malediction, is equivalent to our damned.

má'i ní', you damned coyote!

chínditqádæ má'i bisgâ, from the nether world dried coyote!

chíndash, go to h—!

chínditqâgo, with a similar meaning.

chíndi, chíndi, ghost, or carcass!

dâdzâgo dínf, you have your nerve to say.

tsíkê, get out, you talk like a fool!

dâdo (tâdo) ânt'îni, stop!

tâdo dínfni, don't say that, don't talk so!

bił hodijóli, you blockhead!

dâdo biniyéhego bânahâchf', he makes much ado (fuss) about nothing.

bizahóchf' (sizahóchf', I swear), he is abusive, swears.

do-bil'ilfda, is also used for abusive.

qó'íd, I cursed him, abuse.

qüesdsf, I cursed him for good.

yá'qüesdsf, I cursed him "up," or "right and left."

shf'íd, abuse.

hashíshkhé, I am angry.

hashkhé, angry.

ashgêsh (nt'ê), I gnash my teeth.

y'ínsdzf', I abuse him.

yæsdz', I abused him.

sædzf', I have abused.

yish'f' (nt'ê, or sé'íd, desh'f'), I swear at.

t'ísh bizéde, out of the mouth of a snake, or, you expectoration of a snake! shâsh (bear), má'i (coyote), léchá'i (dog), are used in a similar manner, as also chíndi bizéde, you spittle of a ghost or carcass! tqé'f' bizéde, you cast-out of poverty! dichín bizéde, you castout of hunger!

Similarly, tqé'f' khéyá'dæ, you are surely an apparition from the land of poverty! dichín khéyá'dæ, from the land of hunger! t'ísh khéyá'dæ, from the land of the snakes! chíndi khéyá'dæ, from the land of the departed! also that of the bear, dogs or coyote.

Another variation is: t'ísh bizédéigi, you're just like the spittle of a snake, or a coyote, bear, dog, ghost, etc.

shāsh bizē gūñě' aná, get
into the mouth of a bear,
(snake, coyote, etc.)

Or, interrogatory, as:
łechāi bizē gūñā'ish do aná'da,
why don't you crawl into the
mouth of a dog, etc.

chīnditqādē'igi, like one

from the nether worlds, like
a d——!

chīnditqāgo diná, or dinál,
go to h——!

itsā'hunfigi, or itsā'ho-
chīndi, or itsā'hoshkhāligi,
cusswords, abuse, imprecations.

MARRIAGE AND BIRTH CUSTOMS.

At the age of nubility a ceremony is conducted for the maiden which in substance consists in pressing and molding her body. This completed, the women bathe her body, after which she is told to run toward the east and back to the hogan again, where the bath is repeated, her hair is combed, and her body is spotted with white clay (dlēsh) from nāsēlā. The two songs accompanying the run to the east, and the spotting with clay, are essential to the ceremony, and are taken from the rite of blessing (hohhōji). Recently the eating of the corncake (alkhād) has been added. Should marriage precede the nubility ceremony, as it sometimes does, the ceremony is then performed after the first menstruation.

A youth desiring a maiden in marriage asks another (usually his uncle or close relative, or, if an outsider, some friend of prominence) to intercede for him with the parents of the girl. This party, accompanied by the father or mother of the boy, visit the girl's parents, and after due explanations have been exchanged, offer the customary gift (i'ililí). This gift is usually in the shape of from ten to fifteen horses or their equivalent, or in proportion to the wealth and social standing of both families. It is not the price paid for the girl, but a gift sanctioned by tradition, as the Navaho do not sell their children. Formerly, ten horses were considered a proper gift, and a gift of twelve horses, introduced later, was prohibited (bahādzīd) for religious

reasons. At present the poorer classes offer as little as one and two horses.

When the gift or *igé* has been decided upon a date is set at which the family of the bridegroom will appear at the hogan of his bride (say after five or ten days). Navaho decorum does not permit of visits to the betrothed, nor is it in accord with good taste to look upon or show familiarity with the mother of the girl asked in marriage. Hence the social taboo placed upon the husband and his mother-in-law, who is therefor called *do-yo'ni*, she who may not be seen.

In families of some means the most elaborate preparations are made for a suitable festivity; the boy's folks gather the horses and stipulated gifts, while the girl's people prepare the meats and all things required at the wedding. Toward evening of the appointed day the party of the bridegroom arrive with the horses and gifts at the hogan of the bride, and both bride and bridegroom are dressed, according to means, in their best clothes, and decorated with beads and silverware. (The old custom of placing a buckskin, or the skin of a wildcat, upon the bride, of which she was deprived by the youth's parents upon her entry into the hogan, has now disappeared.)

The bridegroom is first to enter the hogan, which he does by proceeding around the south side of the fire to the northwest side, where he is seated upon blankets spread there for the couple. Presently the father or uncle of the bride conducts her to his side over the same ritual course (*shábiké*), and she is seated to the right of the bridegroom, slightly to the rear of him. Friends and relatives now file in and seat themselves on either side. At the hogan they find all in readiness for a good meal, as well as a small jar with water (*tqóshjē yázhi*) and a gourd ladle (*ádé'*) for the washing. The women, too, have prepared a plain cornmeal gruel (*tqá'níl gád ádín*, no cedar porridge) in a new basket, or one which has not served a ceremonial purpose. This they place before the couple with the closed seam (*bidá ástlóni*) pointing eastward. Upon this gruel the father

of the bride now draws a line with pollen of white corn (*nadálgai bitqádídín*) from the closed seam in the east to the west end of the basket and back again to the east, and another line crossing this with pollen of yellow corn (*nadáltsol bitqádídín*) from south to north and back to south again. Finally, he draws a circle with the yellow pollen around the whole, beginning at the closed seam in the east, and also completing the circle there. Thereupon he places the ladle and water jar before the bride who dips water with the ladle and pours it over the bridegroom's hands while he washes them (*hála tqádsígís*), and he then performs a like office for her. The basket with gruel is now turned toward them so that the closed seam faces the couple. The bridegroom then takes a pinch of the porridge with his fingers just where the line of pollen touches the circle of the east side. He eats this one pinch, and the bride dips with her fingers from the same place. He then takes in succession a pinch from the south, west and north sides, where the lines of pollen touch the circle, the bride's fingers following his. This practically concludes the marriage ceremony, and now a general summons to eat is given to the guests. Subsequent to the meal (or the eating of the porridge) general satisfaction is displayed by rubbing one's limbs with the hands and accompanying this action by some known invocation to *esdzánádle*, the Sun, Moon, She- and He-Rains, and the divinities in general. This is followed by expressions of rejoicing at the happy event, and of good and sound advice to the newlyweds.

It is optional with the married couple to consume the contents of the basket or to join in the general feasting. As the gruel is passed to the visiting guests when the couple so desires custom gradually introduced two methods of deciding the ownership of the basket. The more conservative opinion assigns the basket to the bride's mother (who, of course, can not be present), inasmuch as she parts with her own flesh and blood. The other grants it to the bridegroom's parents, and by mutual agreement he who drove up the horses always consumed the last portion of

the porridge, and eventually presents the basket to the boy's parents. He is therefor said to win the basket, and some designate a basket thus obtained as *tšä' naobäni*, the basket won (at the wedding).

Henceforth the taboo between husband and mother-in-law is strictly observed, and friends and neighbors assiduously assist in guarding this injunction. In the absence of the husband the mother pays her daughter an occasional visit, and in general the wife is not subject to maltreatment owing to the interest shown her by clansmen and relatives. The ancient custom by which brothers-in-law deprived a husband at will of wife, property and home, is at present on the wane.

Marriage between cousins and close relatives, or between members of clans related to one another, are not viewed favorably, and are prohibited by the more conservative clans. (Cf. Gentile system.) To obviate dissension and to insure conjugal fidelity recourse is had to marriage with the sisters of one's wife, a course which is favorably viewed by the wife's parents if the son-in-law prove industrious and decent otherwise. In this event, however, the marriage ceremony may not take place, but the second and third wives are added to the first without ceremony (*banáholtqë*, she is given to him in addition to the other, a wife's sister). Others seemingly avoid the taboo placed upon the mother-in-law by marrying the widow or divorced woman, and adding her daughters as wives in due course of time. This, too, is done without the ceremony, which can only be had for a virgin, though a divorced man may readily repeat it. The so-called *chäná'i*, or privilege of marrying the sister of a deceased wife, was also conceded to the widow in regard to the brothers of her late husband, and many are still faithful to this custom.

Divorce is readily obtained, with or without mutual consent, and is often due to interference on the part of clansmen and relatives as above mentioned, but also to mutual infidelity, as adultery is anything but uncommon. (Frequent recurrence of divorce on the part of the wife, and subsequent fourth, or even

second marriage, is akin to prostitution.) No financial difficulties are involved in the separation as the property line is strictly drawn and each party has its own property. The children belong to the mother, whose relatives frequently take possession of them in early youth unless otherwise stipulated.

Virginity and celibacy are not practiced. Adultery, it is said, was punished by the early Navaho with amputation of the ear, eye or nose (after the manner of the Apache), while, originally, amputation of the breasts and vagina was inflicted, but proved too fatal to be continued. With the advent of the American like customs were eliminated, and at present retaliation or divorce seem to be the only measures taken by the offended party. A heavy fine of horses and cattle is levied upon the crime of rape, and is always exacted by the relatives (clansmen) of the victim. Modern vices, like abortion, race suicide, and infanticide, are not very common with them, indeed, a steady increase of issue is most desirable with the greater portion of the Navaho.

During the period of pregnancy the husband seeks divine aid through occasional performances of the rite of blessing (*hohhóji*), and both husband and wife carefully avoid the sight of blood by violence. The birth of a child is the occasion of a joyful gathering of friends and neighbors. A singer is called upon to assist with select songs of blessing (*hohhóji*), but does not act as accoucheur, as assistance, if needed, is rendered by female neighbors. The laboring woman is placed in a sitting position, and is supported by means of a stout cord suspended from one of the beams, and passed under her arms and about her waist. Hence the popular reference to the suspended cord when speaking of childbirth. The event is heralded with much taunting and joking between men and women, and the advent of twins is always a source of genuine pride and elation on the part of the parents, who accept of them as a signal distinction of divine favor, and designate them as such (*diyín qāāndél*, a double divine gift). Subsequently every effort is made to preserve their lives, and the ceremonies are even more frequently invoked than after

the birth of a single child. Consequently it is untrue that the Navaho dispatch one of twins. (Apropos of this, the event of twin colts is viewed as an evil omen, qondzŋgo ité, and both mare and colts are killed. Not so with the goat, cow or sheep.)

A properly born child which gives no sign of life by sound or crying (do-hadzfigi, voiceless) is not recognized by its parents as belonging to the living (nahokhá diné'é'); consequently it is quickly deposited in the branches of a tree pointing northward (náhokhósji náhosél) and left there. This is done most frequently at premature births (qá'él), which occasionally occur, as in that event the fetus shows little or no life. In either event, however, when the infant has given signs of life by crying or sound (hadzfigi) it is immediately recognized by the parents (da qó, it is theirs), and subsequent death is always followed by the four days' mourning, and the child is put away like any other mortal. (Cf. Navaho Cradles and Mortuary Customs.) A repetition of premature births portends evil and necessitates purification of the mother's womb through the witch chant (hochóji).

The mother always suckles her child, and nurses performing this office are extremely uncommon.

WORDS REFERRING TO MARRIAGE AND BIRTH.

dzíłkhé, a youth.

jíłkhé, a maiden.

khá ádini, a virgin (one who has no husband), which is also used to designate a widow.

ba'ád ádini, designates a widower. Usually widowers are designated as bizhá naghá, going alone.

khináldá (khinásdá, khin-doldá), or khinjildá' (khin-dsísá, khinzhdoldá), the first menses.

chóyín, designates the menses or menstruation thereafter.

khinasdá usually indicates the performance of the nubile ceremony.

igyé (asgyé, adogyé), the marriage (derived from ishqe (aséyé, adeshqé), I marry.

ná'ishqé (naséyé, nadeshqé), I marry you.

danákhá, the nuptial dish.

danákhān dādidī (lit. let us eat the porridge), let us attend the nuptials.

tsābī tqādidīn alnāōsnī (lit. the pollen is crossed in the basket), the porridge is ready.

tqādidīn bīdzītsē (bīdzītsē', bīzdoītsē'), (lit. the pollen porridge is eaten), the nuptial ceremony is taking place.

bitāfs, her limbs and body.

askās (fkās, adeskās), I mold or straighten the limbs, which is performed by women.

osh'ī (f'īl, idēsh'īl), copulam habere.

adishlē (adfla, adeshlēl, or adideshlēl), I commit adultery.

do-ālchīda, she is barren.

yīstā, conception, or, sometimes, awā shidī'nē', birth is approaching.

awā qansōd (qanfyōd, qadīnesōl), I conduct the birth ceremony, or attend it. This term also indicates a woman in childbirth.

tīol nāt'ī, the hanging cord, or tīol nāt'ē', the cord is fastened around her, or sīs nāt'ē', the girdle put around her, terms which are used to designate the approach of birth. Hence, the woman is in labor.

kād'ā inilchī, she is now confined.

ashchī' (ashēlchī, adeshchīl), I give birth to a child.

awā qātīzh, or simply qātīzh (lit. fell out), the child was born.

awā biyalaf, the placenta.
ajishchīgo tō dsīstqī, the afterpain.

shīl'tō' (shīl'tōd, shīdoltōl), I give suck to a child.

ādishtōd (adēsh'tōd, ādi-deshtōl), I wean a child.

shiyāzh, my little one, my child.

shiyē', my son.

sītsf', my daughter.

shaālchīni, my children.

nakhishchīn, twins.

hastqīn ostsēdi, the first man; hastqīn akhēde, the next man, in case of twin boys.

atsē ishchīni, the first born, and akhēde ishchīni, the second born, in case of twin girls.

yōtqā'ashkhi, a bastard.

bayāsīn, shame, shameful.

bayānsīn (bayānizī, bayādīnesīl), I have some shame, or I am ashamed.

onf sā'ā, or onf dēyā, he is jealous.

nāghahunshtqē (nāghahunishtqī, nāghahodeshtqēl), I win your wife's affections.

nchú'i (shi nchú'i), my dolkól, or siskód, squeeze!
property. take care! (said to children).

MORTUARY CUSTOMS.

The observance of the traditional customs at the burial of a Navaho devolves upon two or four mourners, of whom one is a near relative or clansman, while the others are taken from affiliated clans, such as that of the father, wife or husband of the deceased. In the early days one or more slaves, according to the wealth of the deceased, were forced to accompany the corpse, and were killed over the grave and left. In deference to the twelve chiefs of the tribe the number of mourners was set at twelve, though at present the usual number is four and less.

The mourners appoint one of their number master of ceremonies, whose duty it is to guard over the exact observance of all traditional customs. He then directs one of the four to select a site for interment, which ordinarily is a crevice of a rock, or some secluded spot on the mountain side offering ample facilities for covering the corpse securely and quickly.

Previously to entering the hogan, or approaching the spot where the corpse lay, the mourners must disrobe to the breech-cloth and untie their hair, to avoid contamination with a dead person. They then bathe the corpse thoroughly, and clothe it as for a festive occasion. The face is painted, the hair dressed, new garments and calicoes are purchased, belts, rings, bracelets, and other silver ornaments, are nicely polished, the beads are washed, buffalo robes, rugs, blankets, and any other valuable possession of the deceased, are made ready to be deposited in the grave with the corpse. This insures the deceased a kind reception in the nether world.

The corpse is then transferred to the place of interment. The burden, wrapped in a blanket, was placed on the shoulders of two slaves, while at present it is carried by the mourners

unless other arrangements can be made with outsiders, which is preferred in every instance. During the procession any chance traveler is hailed and warned of the presence of a corpse. One of the mourners usually gives the signal by presenting his back to the traveler and facing the procession, meanwhile beckoning with his hands over his shoulder to change the course of his journey. The desired effect is always obtained. The procession proceeds in silence. The mourners should not indulge in unnecessary conversation, they should not expectorate, nor turn in the direction traversed by the corpse, but complete a circle before proceeding. They must use the utmost care not to turn a stone on its side, but replace it immediately to its former position, as any offense against these traditions may be visited by subsequent and sudden death.

The position which the corpse should take in the grave is a mooted question. Some would have it that the corpse be laid on its side with the head in the north and facing west, whence the Navaho originated. Others place this origin in the north, wherefore the corpse faces north with the head in the east. Others, in recent times, pay no attention to such disputes. Once in position, the corpse is decorated and covered with beads, belts, silverware, blankets and rugs, over which a generous layer of dirt, sticks and stone is built to protect it from disturbance by wild animals. Usually these services were performed by slaves, who were dispatched after completing their work, so that their master might enjoy their services in the world beyond. The burial completed, shovels, spades, mattocks, or any tool used in the work, are broken and thrown upon the grave where they are left and never touched again. The mourners then complete a circle and return to the family in skip and hop fashion, carefully avoiding all contact with brush or cactus, as this might delay the spirit in its flight to the other world.

On reentering the hogan they bathe their bodies again, and now remain in mourning for four consecutive days with the family of the deceased. The family, which has been fasting

since the demise, is now allowed to take food and drink. This fast, by the way, extends even to babes, who are not given suck until after the return of the burial party. If this be unusually delayed wood ashes is applied to the face of the child, or rather to its forehead, before giving it suck, which will guard it against the malice of the dead. On the whole, a prompt and early burial is desirable, both to rid the family of the danger of contamination, as well as to terminate the fast as early as possible. The fast and mourning are not obligatory with the family member who has not been present at the death and has not viewed the corpse. Hence, it is permissible upon notice of a death not to approach the scene in order to evade this obligation.

The four days of mourning begin with the night following the demise, or with the very night in which it occurred. In deference to the spirit of the deceased the mourners and family abstain from unnecessary conversation, from their usual sports, from travel and labor. They arise at dawn, and leave the hogan only when necessity compels them, but always in company of the master of ceremonies. Moreover, the sentry on guard, by the usual signal, keeps the *death line*, or the path from the hogan to the grave, open during these four days, in which the spirit of the deceased makes its journey to the lower worlds. But on the morning following the fourth night the mourners again bathe themselves, all members of the family imitating their example. After a brief mourning and wailing the ceremony is concluded, and the deceased is nothing more than a spirit, whose influence is to be dreaded.

In most instances care is taken to remove the dying from the hogan. In the event, however, of a death within a hogan, the east side, or doorway, is closed, and an opening is made in the north side through which the corpse is carried out for burial. The hogan is then burnt and leveled to the ground, while the earthen pots used in cleaning the corpse, or cooking utensils, are broken there and then. Ordinarily, too, the finest riding animal in possession of the late owner is saddled near the grave and

killed and left to rot. Formerly the animal was strangled and then killed, while at present it is shot. Saddles and blankets, too, were formerly left to decay, while at present the precaution is taken to break and cut them to pieces.

Mourning was prohibited in the case of a warrior dying from the effects of wounds received in actual warfare, owing to the belief that death might overtake the mourners in a similar manner. The warrior retains his rank and prowess even in the nether worlds. The fallen foe is his slave, who must serve him beyond, hence they were buried near by, so that the spirits below might recognize them as such. On the other hand, weapons and the shield were scrupulously barred from the grave, as they might intimidate those spirits, whereas an unarmed warrior is readily enlisted in the rank and file of that army. Hence, knives, arrow-points, and everything suggestive of a weapon, is removed from the ornaments and barred from the grave even to-day.

Good custom also required a lapse of ten to twenty days before a division of the property of the deceased was made. This, as well as some of the customs above described, are not always observed.

WORDS REFERRING TO BURIAL.

dsístqf, that which lies there, the corpse.

chíndi sètqf, is used, probably of an unidentified corpse.

yō'ílá'i (yofda'ilá'i), he who puts it aside, the mourner.

yōě'élne', where it is put away, the grave.

jishchá, the grave.

nchúigi, or nalyéhe, the goods or ware put into the grave.

do-ádáda, they do not eat, the fast.

dahosdísín, they have regard or respect.

hoké', the burnt ruins (of hogan).

chíndi, a spirit.

chínditqá', the lower world, world of spirits.

yihahá! chíndi! behold! a vessel (pot, etc.) of a spirit!

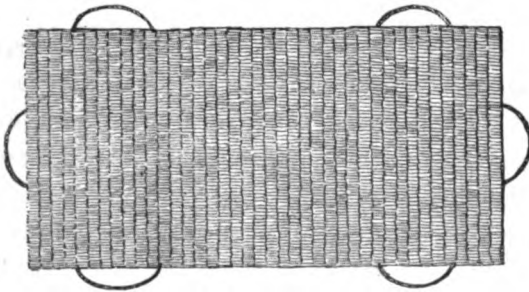
bizéjitqf, it (the horse) is strangled.

biñijlñi, it is struck (with a stone, etc.)

chíndi lësh behalkhádi, a broken burial shovel.

NAVAHO COSTUME.

The earliest Navaho costume was very meager and constructed of yucca and grass fiber. To obtain the pith the yucca leaves were boiled and pounded with a stone, then twisted and braided with mountain grass for such fabrics as the roof of the house, the mat for bedding, the leggings, shoes, and the blanket. This



Yucca Blanket.

yucca blanket was occasionally braided with rabbit fur and, as a rule, provided with handles of braided yucca on the sides and ends to better enable one in drawing it close to the body.

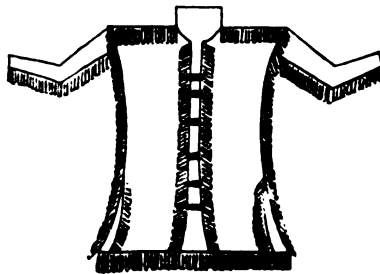
tsázi, yucca.

tłó' beěldłádi yistłó', the blanket woven of grass.

bitqádādeshbīzh, braided at intervals.

gā' clídi, rabbit fur robe.

Subsequently, more substantial buckskin suits were substituted for the yucca fabric. though the buckskin suit was expensive, as well tanned skins were bartered from the Utes. The accompanying illustration shows a buckskin shirt with fringes along the front, the



Buckskin Shirt.

shoulders and sleeves, as well as the sides and lower end of the shirt, which was worn over the pants. Buckskin or sinew was used as thread, while the fringes were cut after sewing the strips into the seams. Thongs, which were eventually displaced by brass buttons obtained from the Utes, were used in fastening the shirt in front. These shirts were either gray or the natural color of buckskin, or dyed yellow and red.

With the introduction of wool and weaving the blue and red striped shirts illustrated on page 248 were added to the men's apparel.

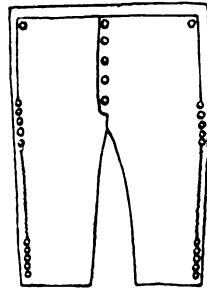
Another shirt which, like the preceding, was originally borrowed from the Pueblo, was still in vogue not so very many years ago. It was woven of wool yarn in the shape of a woman's dress, but provided with a longitudinal slit in the center for the purpose of passing it over the head. It was entirely black in color and the only decoration was a tassel in each corner. When too filthy it could be washed and redyed, and from its varied use in wearing it either side out, or turning the front to rear at will, it was called æ náhoťáli, or bíl hízhín æ náhoťáli, the black dress shirt which may be worn either side up. As the surface of the shirt was very rough (dítśǵd), which it was impossible to obviate even by a loose weave (íłzhóligo istłó), a fur collar made of wild-cat skin (nosbdúi bakhági) was added and tied with buckskin thongs. The front sides of the shirt were folded inwardly and overlapped by the rear, in which fashion it was held close to the body by means of a cord tied around the waist. Despite this precaution the wind had free access to it, wherefore the more humorous dubbed it æ ákídanálkí, or the shirt which flaps in the wind. It was worn in addition to and over the ordinary wool or calico shirt, and some did not despise to store it away (índa-sístsōs) for festive occasions. At present it has disappeared entirely.

The so-called big shirt was made of four-ply buckskin glued with pitch, and was impenetrable to the thrust of spear or arrow.

It was used by some in actual warfare, which is true also of the so-called helmet used in covering the entire head.

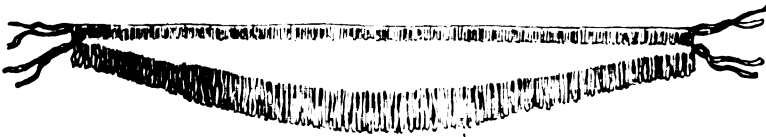
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|-----------------------------|----------------------------|
| ābāni ā, a buckskin shirt. | yō nłchfn łitsōigi, brass |
| tsāg, the fringe. | buttons. |
| tsāgai, the bone awl used | ā tso, the big shirt. |
| in sewing. | do baghāil'ōda, impenetra- |
| nāshkhād (nāsēlkhād, ūdesh- | ble. |
| khāl), I sew. | clāhādīlkhādi, the helmet. |

Buckskin pants were made to match the color of the shirt. The short pattern illustrated here reached just below the kneecap and was provided with brass buttons in front, along the outer seam of the leg, and one on either side at the hip. The inner leg only, and a small strip on the outer portion of the leg, were sewed, but no fringes added. The pants were buttoned first in front, then along the knees, and finally at the hips. It is said that seven days were required in which to finish one pair, so that buckskin suits are now rarely made. Occasionally breeches covering the entire length of the leg, and decorated with fringes, were worn.



Buckskin Pants.

- ābāni t'ajī ā, buckskin pants.
hādīlzhī (covering the entire leg), buckskin breeches.



Buckskin Belt.

The buckskin belt worn over the short pants consisted of two pieces of buckskin sewed together so as to leave an opening in

which to carry flint, medicine, tobacco, and such trifles. It was decorated with fringes along both seams, and fastened by means of four thongs provided at the ends.

sīs lā āzē (the belt complete), the buckskin belt.

The frail yucca leggings, too, were displaced by those of buckskin, which were wrapped about the leg and secured with the buckskin legging cord. Eventually the garter of yarn took the place of the latter, while the fringes along the seam of the legging, too, have disappeared.

The early buckskin breechcloth has now been displaced by one of goat hide and ordinary manta. It is worn continuously by the men, just as the waistcloth is worn by the women. The blanket and moccasin have been mentioned elsewhere.

tłō' yistlé, yucca leggings.	jā nézhi, the garter.
ābāni yistlé, buckskin leg-	tłēstsós, the breechcloth.
gings.	tłákhāl, the waistcloth (of
yistlé tłōl, legging cord.	women).

Women clothed themselves with the blanket dress, which was fastened with the sash, and later added the shawls. In journeying, moccasins with long uppers, and foot-wraps of buckskin, were used. Children's clothes, whenever supplied, did not differ except in size. Mittens for all were made of wildcat skin.

esdzán dabi'ē, women's	esdzán bizis, the sash.
clothes.	khē bikfdesdīsi, foot wrap
alchfn dabi'ē, children's	(leggings).
clothes.	lājīsh, mitten.
bīl, woman's dress.	nashdūi, wildcat.

THE HEADGEAR.—Helmet shaped caps were worn by warriors on raids and journeys, and hung up outside upon their return, as good custom forbade the use of the hat inside the hogan. They were made of buckskin, though some clans preferred

mountain lion and wildcat skins, by which caps they were usually recognized. The cap was decorated with owl, turkey, crow, and eagle feathers, which hung loosely over the rear of the cap. The front was decorated with a strand of abalone shell (and bayeta) without which the cap was practically worthless. Caps were measured by the spread-out fingers, as the semi-circle thus described is equal to that obtained by placing both hands on the back of the head. The two semi-circles, of equal size, were sewed together so that the seam passed from ear to ear. The front was then cut to the shape of the forehead, and a series of holes punctured into the top and rear of the buckskin caps. The latter were also topped by a straight or curved peak made of twisted and hardened buckskin.



Figure 1.

Figure 1 illustrates the cap made of the head of a mountain lion; figure 2 that of the wildcat. Both were provided with a flap in the rear covering the neck, and were held in position by means of a chin cord of the same material as the cap. Two eagle feathers, set in a cluster of owl feathers, adorned the tip, and a strand of abalone shell the forehead. The caps distinguished the *khīyā'āni* clans.



Figure 2.

Figure 3 illustrates the whitish cap of buckskin, which derived its name from the curved peak of badger or mountain lion skin whitened with a mixture of almogen (*dlēsh*) and charcoal (*tēsh*). Two eagle feathers, set in a cluster of plushy owl feathers, hung loosely from the tip of this peak.

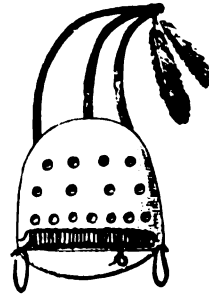


Figure 3.

Figure 4, the smooth cap of buckskin, was so called because it fitted the head closely and concealed the hair. The eagle feather, too, which hung over the flap in the rear, was not visible from a front view. A single peak of hardened buckskin adorned the top.

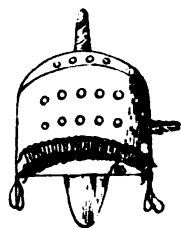


Figure 4.

Figure 5 illustrates the pointed or forked cap, which was so called because of two peaks extending right and left. Two eagle feathers, nestling in a cluster of turkey and crow feathers, were secured between the two peaks, and a flap with fringed edges extended over the neck. The front extended slightly over the forehead, and the cap was held in position by means of a chin cord of buckskin.



Figure 5.

Figure 6, the cap with opposite peaks, was similar to the preceding. The base of the peaks were set close together, while their tips were curved outwardly in opposite directions. Eagle and turkey feathers adorned this cap, which was also provided with earlaps.

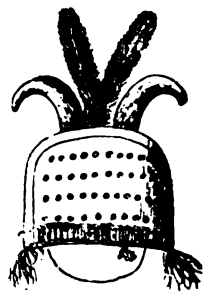


Figure 6.

Figure 7, the feathered cap, was provided with a triangular peak decorated with eagle and turkey feathers. Between the punctured lines on the front and rear bayeta cloth and abalone shell were sewed, and the cap was secured below the chin by means of two buckskin thongs from either side.



Figure 7.

Headbands made of beaver, muskrat, and otter skins, were highly prized as a headgear, and profusely decorated with precious stones. These were a mark of wealth, while

the poorer class were satisfied with buckskin headbands. Women did not wear a headgear.

WORDS.

chä', the hat, hatband.	gägi tsös, crow feathers.
nashdütso chä', mountain lion cap (Fig. 1).	abäni baghâdeshgîzh, punctured buckskin.
nashdûlbai, or nashdûi chä', wildcat cap (Fig. 2).	abäni bikîdesdîz do ntîs, bucksin (twisted and hardened) peaks.
khîyâ'äni chä', the cap of this clan.	abäni nahîltsös, buckskin earlaps.
chä' ditlôî, the woolly cap.	hayayâ änantî', chin cord.
chä' bîdzîgai, the whitish cap (Fig. 3).	hatsîyädö, the flap in the rear.
chä' hodölkhö', the smooth cap (Fig. 4).	yägo itsä nëhestâs, the fringed rear flap.
chä' halgîzh, the pronged cap (Fig. 5).	dîchîli sênîl, the abalone or haliotis band.
chä' ätsâdækhai, cap with opposite peaks (Fig. 6).	nâkâlchî, bayeta.
chä' ätsösi, the feathered cap (Fig. 7).	tqâbâstqîn chä', otter headband.
ätsâ bitsê, eagle feathers.	tqâbâ'mä'i chä', muskrat headband.
tqâzhi tsös, turkey feathers.	chä chä', beaver headband.
nâëshjâ tsös, owl feathers.	

MODERN COSTUMES.

The ancient national costume, especially that of the men, has about all but disappeared since their contact with white men and the advent of the trader among them. Scant remnants may still be found, such as the moccasin worn by both men, women and children, though the American boot and shoe has found favor with many. The old sash and the buckskin wraps, too, are still worn by many women, while a headband and the silver mounted

wrist-guard are worn by many men as a reminder of by-gone days. But, as the Navaho appears to-day, he may be sketched about as follows:

The hair is drawn smoothly to the back of the head by means of a whisk broom made of a bunch of mountain grass. Here it is done up into a compact club or queue and tied with a white woolen cord so as to give it the shape of an hour-glass. A bead or two of turquoise, or other shell, sometimes decorates the hair-



Hair Broom.

cord. Quite a number now wear the hair cropped off in a straight line, about an inch below the ear. A red silk sash, or vari-colored kerchief, is worn as a turban about the forehead, and is often decorated with turquoise and silver ornaments. The broad-brimmed western hat, usually of black or gray color, has, however, displaced the headband to some extent.

They all have the lobes of their ears pierced, and from them are dangling ear-pendants, made either of a flat piece of polished turquoise, or a small string of thin disks of turquoise, or of good-sized silver rings, some of which have one or more loosely sliding beads strung upon them. These silver earrings are sometimes of a pretty generous size and weight, so that when riding they are often turned up over the auricle, as the jolting of the horse's gait cause them to jerk uncomfortably at the lobes. About their necks they wear strands of beads, either of coral, turquoise, or red, white and black stones and shells, or heavy necklaces of silver beads, and other ornaments of their own make.

The upper part of the body is covered by a short shirt of bright-colored calico, to which breeches of the same material, or manta, are added. Coats, vests and pants of American style and

make, especially corduroys, are not infrequent, and are worn over the loose breeches of light cloth. Belts, consisting of large silver disks of silver strung upon a strip of leather, are worn by both men and women, though the men usually girth themselves with a leather cartridge belt and sixshooter. Some of the older men, too, may often be seen with a leather bag strung over their shoulder and hanging over the left hip. This is used for small articles, such as matches, tobacco, pocketknife, and the like.

On their feet are low moccasins, dyed a dull reddish-brown or black, and soled with rawhide. Footless stockings, which leave the toes and forefoot free, are worn with the moccasins by many men, in addition to leather leggings, or leggings of buckskin, which are fastened below the knees with the garters or cord. In winter the foot and moccasin is protected by a kind of overshoe consisting of green sheep- or kidskins, which are secured to the foot with the woolly side turned in.

Though the bow and arrow, lance and shield, were formerly part of the costume of the Navaho warrior, the firearms which have now replaced them are but ornamental additions.

There is no difference in the summer and winter dress, and the blanket is worn summer and winter as a mantle. The more progressive Navaho do not disdain the white man's garb in all its details, and the Navaho in general take willingly to the white man's dress.

The women dress the hair like the men but never wear a head-band. Their ears, too, are pierced, but they do not wear ear-rings. Beside their bead necklaces, which are like those of the men, they wear a number of silver bracelets, rings, etc. They wear long calico skirts, and use the same kind of shirt or tunic and robe as the men, though the latter are usually of brighter colors. About the waist is wound a long red sash, or the silver belt. The moccasin, too, is of the same shape like the men's, with slightly higher uppers. On festive occasions or journeys the moccasin is supplemented by the legging-wrap, consisting of

a buckskin wound in regular folds around the lower leg, from ankle to knee, where it is secured with pieces of buckskin.

The children are dressed about the same as the adults, only their garments are smaller in size, and often very scant.

WORDS.

ə, a shirt, dress, clothes.

ə tso, a coat, overcoat.

třaj'ě, pants.

chalékho (Sp.), or da'ndish-dó'i, a vest.

khéndōtsōsi, shoes.

khéndōtsōsi nnézi, boots.

khétqil, a sock or stocking.

esdzán bi'ě, woman's dress, skirt, etc.

akhál yistlé, leather leggings.

akhál yistlé əshťě'nbfnsh-gyěsh (əshťě'nbfnlgřzh, əshťě'-nbfdeshgřsh), I cut the leather for leggings.

yō nlchfni (yolchfni), or yō tsfni lagáigi, silver buttons.

ə bił da'naznfligi, clothes buttons.

bagháhodzá, a buttonhole.

biłda'ná'əsh'a (biłdă'nsá'ă, biłdă'ndesh'ál), I button it.

béhidesdōn, tight fitting clothes.

behădītěhi, clothes.

chřnbă řđřn, spotless.

chřnbă řđřn go əshłě, I cleanse it.

chřnbă tqanăsgřs (băttqasě-gřs, băttqădesgřs), I wash dirt off.

chřn băishđě (băhřldě, bă-desđđă), or băishtōd (băhřtōd, bădeshtōl), I wipe dirt off (from silver, clothes).

ă nřgo řřłtsōs, turned inside out.

ăttqěl řřłtsōs, an apron.

chă' dăhaskbăni, a round hat.

chă' lăbăigi, a gray hat.

chă' řřzhřnigi, a black (modern) hat.

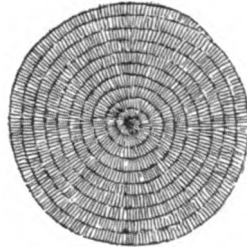
chă' bijăněl hulōni, a tasseled headband.

chă' dă'dijăhigi (sticky), a silk headband.

chă' řřłřnigi, a freckled headband, etc.

BEDDING.

The early bedding consisted of a round mat of grass woven *sunwise*, which was used in connection with the grass blanket. Buckskin, buffalo robes, and sheep-pelts, have long since superseded this grass mat, and at present the sheep-pelt is used almost exclusively. These are spread out on the floor of the hogan, and men, women and children retire here, wrapped in their blankets, with a saddle, coat or convenient bundle as a pillow. American beds and mattresses, too, are used by some.



Yucca Mat.

WORDS.

yā́tqéł (yaá́tqéł, which lies under), bedding.

tłó' yā́tqéł, the grass mat.

shábikégo yistłó' (bitqáda-deshbízh, braided), woven sunwise.

ábáni yā́tqéł, buckskin bedding.

yā́tqéł (debé bakhági yā-

tqéł), sheep-pelt bedding.

ayán ayā́tqéł, buffalo robe bedding.

tsí'ál, a pillow.

tsáskhě, a (modern) bed.

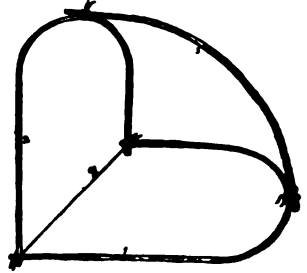
bakhádantqé, a bedstead.

níshkhád, or níłkhāgo dineshtqéł, I'll spread out and retire.

NAVAHO CRADLES.

When a child is born (qátlísh) it is wrapped in a sheep-pelt (yā́tqéł), woolly side in, and placed between the fireplace and west side of the hogan at the spot designated as hunábá'ji. The old women (sáni) of the neighborhood then make a rude canopy or shelter of cedar (gád), or other pliable boughs, with which to cover the head of the child and protect it from sparks of the fire. This canopy, called biníłkídi, or beníłkídi (face cover), consists

of three bows, one as a base resting on the ground (1), the second (2) placed upright and attached with cords to the ends of the first, while the third (3) extends as a brace from upright to base, and is secured with cords at the center of the upright bow and center of bow at base. A cord (4) stretched from end to end of the bow at the base completes this temporary canopy, which is held in position by the weight of the child resting on this cord. A blanket or

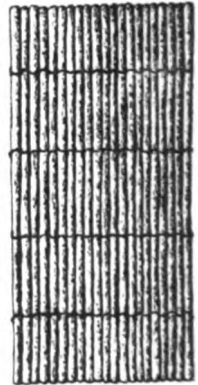


Face Cover Cradle.

cloth, and in wealthier families a tanned goatskin, is thrown over this framework to insure against injury from the sparks of the fireplace. It is of interest that the legends designate the first, or bow at the base, as *shaitqá* (a word of no special meaning); the second, or upright bow, as *natsíllid* (rainbow); the third, or brace, as *natsíllid ágúdi* (the curved rainbow).

awé biníkkídi, face cover.

The object of improvising this rude cradle is obviously to protect the frail and tender (*dííódi*) limbs of the newborn babe; hence it is employed for the first twenty-five days after its birth. The cradle is now supplemented by a small blanket for a pillow, and a harder foundation in the shape of twigs, which are peeled of their bark, laced together with four strings, and placed under the child, which still occupies the place in the hogan mentioned in the preceding paragraph. This second cradle is known as:



Laced Cradle.

awétsál yistíónigi, the laced cradle.

tsí istíóni, laced twigs.
bitsiyá síltsós, the pillow.

The laced twig cradle is employed for about two months and

then displaced by a third type, which is employed for a period of another month or so, and finally makes way for the cradle proper, or fourth type. The bottom of this cradle consists of a single board, which accounts for its name, *awêtsāl lă äzë*, the whole cradle, while the board on the final cradle is split in two and then laced together, so that it is sufficiently designated by *awêtsāl*, the cradle. As both types are similar in construction, and are similarly used, the following applies to both, with such exceptions as are noted.

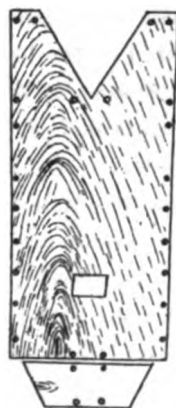
The wood used for the various parts of the cradle is such as may be easily hewn to the desired thinness; hence, cottonwood (*t'is*), pine (*ndîshchf*), willow (*kāistsō*), weeping willow (*t'is tsōs*), and piñon (*destsfn*), are ordinarily employed, though recently some avail themselves of boards from a coffee or dry goods box. However, the wood of a tree riven by lightning, or broken by the winds, or against which a bear has rubbed himself, is never used for the cradle, as that may prove injurious (*bahādzdld*), hence:

tsfn bō'ōs'nī', or *f'nī' bīndī'ā*, or *f'nī' bīdī-tsfn*, a tree riven by lightning.

nfyōl tsfn lăhidīnfyīzhi, or *tsfn nfyōl qayīdzīsi*, or *nfyōl bīndī'ā'i*, a tree curved or broken by the winds.

shāsh yēs'nāhi, or *shāsh bīndī'ā*, or *shāsh bīdītsfn*, a bear's tree, or which he has used in rubbing.

The upper part of the boards is cut out in the shape of a frustrum, which gives them an appearance akin to a long bootjack. Across the width of the board, on the bottom side, a narrow strip is added which, together with the small blanket head-raise (*tsi'āi*) on the upper side, is secured with thongs through holes



Whole Cradle.



Cradle.

provided for this purpose in the boards and strip. (All thongs used for lacing and the loops are of buckskin, or tanned goat-skin if available, otherwise of wool cord.) A small hole is provided in the lower part of the third type of cradle to allow for a passage of the urine, a provision which in the fourth type is maintained by lacing the boards loosely in four places in the center. A foot-rest in the shape of a rounded or triangular board is lashed to the lower part of the cradle, and the sides of the boards are provided with eight holes each, with two holes in the footboard, to receive the lacing loops inserted alternately, so that the first loop is passed through the first and third holes, the second through the second and fourth holes, and so on down the line. Above these lacing loop holes two additional holes are bored to receive the bows for the canopy.

These bows are constructed of thin and smoothened scrub oak, cedar, or other convenient wood, four of which are laced together with four buckskin thongs to form a single bow, and then tied loosely to the cradle to allow of a free movement back and forth when inspecting the child. The bow in use on the third cradle is transferred by many to the final cradle. (Some employ a single wide or two fairly wide bows at present.)



Canopy Bows.

The single decorative feature of the cradle consists in a tassel of fringed buckskin (now leather), which is knotted and passed through the hole in the upper corner of the boards. A setting of turquoise (*dotłzhi*) was inserted near this tassel when the occupant was a boy, with a setting of white shell (*yölgaš*) for a girl. Silver buttons have now displaced this setting.

The bottom of the cradle is then lined with the plushy bark of the cliff-rose which, from its use in the cradle, is identical in name (*awétsäl*. This word originally designated the receptacle in which to lay the infant to be carried on the back). A small blanket is laid over this bark, the child placed upon it, and the ends of the blanket securely fastened about its limbs, leaving

only its head visible, which rests upon a blanket or cloth pillow (*bitsiyá siltsōs*) placed over the head-raise (*tsi'ál*). The child is now strapped to the cradle by means of the lacing cord, which is passed from the upper right hand loop down the line in zigzag fashion, and finally through the loop on the footboard. (In type No. 3 the lacing and carrying cords are frequently not used, though holes are provided for the lacing loops.) A cloth or, in



Woman with Cradle.

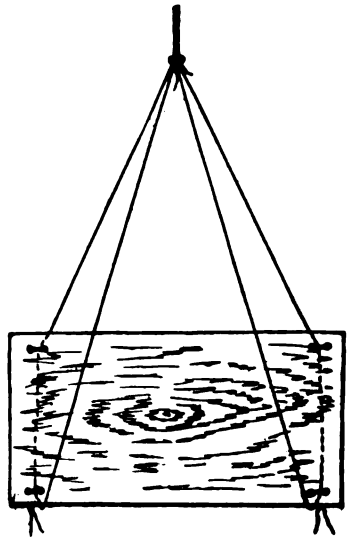
wealthier families, a piece of well tanned goatskin, covers the bow and upper part of the cradle, and is secured to its sides near the base of the bow. This canopy affords both shelter and protection, and may be raised or lowered at will.

The three types of cradle first mentioned are discarded after use and made anew for each occasion. The fourth type, however, is preserved for future use whenever a child has been

successfully weaned from it. Some, therefor, designate it as *awætsäl yeyī'ndīdā*, the cradle in which it grew up, in addition to *awætsäl*, the cradle, and *awætsäl aqđīdīl*, the cradle (in which the boards strike each other because they are lashed together loosely). When death overtakes the child in any cradle no further use is had for it as it is injurious (*bahādзіd*), and the cradle is then buried with the child. Previously, however, all knots are untied, the thongs washed, and all parts of the cradle are placed near the child in its grave.

The convenience of the cradle may be gleaned from its varied use. At home it may be leaned against the walls of the hogan, or placed anywhere under the direct and constant supervision of the mother. When astride, she places the cradle with the child across her lap over the pommel of the saddle, while afoot she may rest the cradle in her arms, or slip it over her back and carry it by means of the carrying cord attached to the sides of the cradle and passed over her forehead and shoulders. No attempt has therefor been made to substitute foreign products for the native contrivance.

To remove the possibility of harm from other children, or the bite of red ants, some parents construct a swing in which to lay the cradle. This is a flat board punctured at the corners with two holes each to receive the cords, one of which is tied at each corner. Two long cords are then passed below the board and secured there with the remnant of cord at each corner, while the four ends of the long cords are brought together over the center of the swing and tied there in a knot. To this knot another cord is attached and the swing suspended from a beam in



Swing.

the hogan, or the limb of a tree outside, beyond the reach of children and vermin. Occasionally the mother gives it a swing, and may thus go about her work undisturbed. The swing is called *awæ ndabáli*, baby swing, or *dahidikhá bí ndábál*, the suspended swing with the cradle.

In legendary descriptions the two boards in the rear of the cradle are constructed of *tqádiklil*, dark water. They are held in position by a piece of *tqáltlá'ji natáflid ágúdi*, a curved rainbow at the bottom (of water). The foot-rest is constructed of *shábitlá' jilchí*, basic sun-red, in shape similar to the present type. The decorative fringes at the top of each board were made of *nhtsánajin*, dark rain streaks. The four staves or bows of the canopy were laced with *natáflid lágal*, white rainbow; *natáflid dotflsh*, blue rainbow; *natáflid lhtsól*, yellow rainbow, and *natáflid dilqil*, dark rainbow; and the bow itself, constructed of *hayolkhá*, the dawn; *náhodætflsh*, the skyblue; *náhotsoi*, the evening twilight, and *chahalqél*, darkness. The lacing loops, eight in number, consisted of *nhtsátflol*, rainrays; the *bitqéldæ bí'ldlóigi*, or lacing cord for the front, of *atsínltflsh*, zigzag lightning, and the *benáljidi*, or carrying cord, of *shábitflól*, sun-rays.

WORDS.

awætsál, baby-bed.

awætsál, cliff-rose, *Cowania Mericana*; order *Rosaceae*.

tsín nêheshjé, boards.

bikhétla setqáni, (which is under its feet), footboard.

awætsál bitflól, (baby-bed string), lacing string.

awæ benáljidi, (with which the baby is carried), carrying cord.

awæ binikfidi, bow or canopy of the cradle.

awætsál bitflá setqáni, the brace in rear of cradle.

tsí'ál, pillow.

awætsál bizhí', bark of the cliff-rose.

binikfideltsös, (face covering), piece of buckskin used to cover child.

awétsäl ashlé (áshlá, adesh-
hl), I make a cradle.

awétsäl nashjid (nashéljid,
nádeshtjil), I carry a cradle
(on the back).

awétsäl nashtqe (naséltqf,
nadeshtqél), I carry a cradle
(in arms).

awétsäl nashkhâ (nasákhâ,
nashkha do), I carry a cradle
(empty).

awétsäl dáhidishkhâ (dfkhâ,
dideshkhâ), I hang up the
cradle (empty).

awétsäl dáhidishtqé (dflqtqf,
dideshtqél), I hang up the
cradle (with child).

awétsäl ni' ninishtqé (niltqi,
nideshtqel), I lay the cradle
down on the ground (with the
child in it).

awétsäl ni' ninishkhâ (ni-
nákhâ, ndeshkhâ), I lay the
cradle down on the ground
(empty).

awétsäl nadistsé (dftsí, di-
destsé), I lean the cradle
against something.

awétsäl bildishtló (déhtló,
dideshtló), I lace the cradle.

awétsäl ké'esh'ád (ké'fâ,
Kedesh'ál), I unlace the cradle.

awétsäl bizhi' dinishqfsh
(dinfyizh, dineshqfsh), I rub
the bark.

awétsäl bizhi' yilzhóliashlé,
I make the bark of the cliff-
rose soft.

awétsäl biló' bldashtló
(daséhtló, dadeshtló), I put
the strings on the cradle.

awé bitsál biyishtqé (yflqtqf,
deshtqél), I put the baby in
its cradle.

awé bitsál biqashtqé (qál-
tqf, qadeshtqél), I take the
baby out of its cradle.

awétsäl shanákhâ, bring me
the cradle (empty).

awé shánltqe, give, bring
me the baby (bed and all).

THE CHASE.

The hunting of deer, antelope and elk was always conducted with many rites under the guidance of a shaman. Accordingly we find the following rites:

nidzi hanf, the corral hunt rite.

nashdüiké, the rite of the wildcat.

tñistsókè, the rite of the bullsnake.

natléitsokè, the wolf rite.

These rites are at present not strictly observed, and the presence of a chanter is not required. However, some of the ancient customs are still observed. A corral, for instance, serving as a camp for the hunting party, is built with the fireplace in the west of it. Such songs and prayers as may be known to the hunters should be recited, after which they proceed in single file until ready to disperse in bands of two, or singly, and return to the camp at dusk. Joking and gambling, or leaving the corral unnecessarily, are forbidden. The booty is divided between the hunters, the hide usually becoming property of the person first sighting the game, unless otherwise agreed to.

Owing to wanton slaughter and increasing settlement game is not very plentiful, but, notwithstanding the game laws to the contrary, hunting parties often make raids and kill deer merely for the hide and sinew.

Various methods were observed in the early days in hunting deer, antelope and elk. A large corral, opening to the east, was built of shrubbery and the game driven into it and slaughtered. Traces of these corrals may still be found in various localities.

A pit, covered with brush and grass, was sometimes concealed behind an artificial fence, which the game was forced to take, and thus be entrapped and slaughtered in the pit beyond. Another method was to dig a pit, or series of pits, in a zigzag row, each pit being about six feet in depth and covered with brush and a light layer of ground. A strong, pointed stake, about five feet in height, was planted in the center of each pit, and transfixed the prey as it fell into it.

Game was less frequently captured by setting fire to the underbrush around a place of concealment and forcing the frightened animal within convenient range of a bowshot.

Stalking, too, was known. The skin of a deer or antelope is fastened around the shoulders, drawing its head close over that of the stalker, whose body is smeared with clay. The stalker holds two small sticks in his hands to assist in walking in a stooped position. Bow and quiver (or gun) are slung under

his belly, while the headgear is arranged so as to enable the stalker to throw back the skin and antlers, and disencumber himself for an opportune shot.

Any one of these methods was permissible in securing hides and sinew for ceremonial purposes, though the ritual manner of dispatching the animal by strangling, instead of wounding it, must be observed.

When a bear has been killed pollen is strewn from chin to butt along the stomach, and on its arms and legs. The incision is made along these lines and the pelt removed. The best portions of the venison are then severed, carried home, and laid aside in a heap. A sacrifice, consisting of *báshzhĩni* (cannelcoal), or other *ntfís* (precious stones), and prayer, is made over the venison, after which it may be consumed. As a rule, however, the bear is avoided.

Badgers, prairie dogs, rabbits, mountain rats, and the like, are shot with bow and arrow or gun. Rabbits and rats were also trapped in a stone-trap. Prairie dogs are sometimes decoyed by means of a small mirror reflected into their burrow, blinding the animal. This moment is chosen to pierce it with a barbed arrow. In the vicinity of water they are often flooded. The drowning dog, which comes to the opening of the burrow for breath, is quickly snatched by the neck and killed with a stone. Floods caused by the overflow of arroyos in the rainy season usually attract a number of Navaho in search of hapless prairie dogs.

Rabbits are run down in the snow on horse or afoot. A party combining in the summer time for a rabbit chase will form a large circle, driving the rabbits to the center, where they are clubbed to death.

Eagles were decoyed by means of a rabbit dummy, which was worked forth and back by means of a string attached to it. The hunters, concealed in a pit covered with sticks and weeds, usually select a place much frequented by eagles for their operation. The bird is caught by its feet and neck and pulled into the pit.

The beak is filed with a stone, and the down and tail feathers are plucked. If other eagles are in sight he is put aside, and released with the others who have undergone the same treatment. Feathers obtained in this manner are known as live feathers (*qinā atsós*). The eagle hunt always requires song and prayer.

Squirrels, turkeys, mountain sheep and porcupine are also hunted at times. Birds were usually ensnared.

WORDS.

dinaf, game.

bí' hashzhé, or *bákhāshzhé*, I hunt deer; also *jádi*, antelope; *dzē*, elk; *debétsétqā*, bighorn; *hazaf*, squirrel; *dló-dzilgai*, pine squirrel; *tsídít'ni*, ground squirrel; *dlū*, prairie dog; *tqázhe*, turkey; *dasáni*, porcupine; *nahashchíd*, badger.

tsétóhi hashzhé, or *hansh-tqá'*, I hunt for bear.

gá'tso, or *bí' shānaāghá*, I run jackrabbits or deer down.

libe shānaāghá, I run them down with a horse.

bí' sélō, I roped a deer.

nā'izē nashzhé, I hunt silently (I creep upon).

bí' banash'ná', I crawl upon a deer.

bí' bil'ideshdó', I shoot a deer (with a gun).

gā' dishdó', or *yishkhá*, I shoot a rabbit with an arrow.

bí' bikínshzhé, I found a deer on the hunt.

bí' sélqí', or *iyéltqí'*, I killed a deer.

bí' ásesī (sésī), I missed a deer.

alkēnashá, I walk with pieces; i. e., I cut and put the strips aside. (The venison was cut into strips, hung in a tree, and covered with a hide until it might be removed).

alkénséyá, I have finished cutting, or *altsō ndīgish*, or *niyélgish*, I have cut it all.

dá'nashéltjē, I have put (the meat) on high (in a tree).

nikh'niyf', or *nanshgí'*, I carry the meat home (afoot or on horse).

nīdzín, building corrals, corralling the game.

chákē', a pit.

chákēndē (chákīndē), falling into the pit, trapping game in pits.

ánáhaká, burning around,
smoking the game out.

bédá', with the antlers,
stalking.

jádi dētqél, antelope antlers.

bédá' nasht'á' (nsíst'á,
ndesh'ál, or ndesh'tál), I put
on the antlers.

naazt'æ náázhé, hunt by
round-up (of rabbits).

atsá aq'níl, or qa'aq'níl,
(pulling in) eagle trapping.

ōd, eagle trapping, and the
ceremonies in connection with
it.

NAVAHO GAMES.

Amusement and pastime, but above all, a means of gambling is furnished by the various games, for the Navaho is a passionate gambler, and his games of dexterity and chance have no interest unless a stake is to be won. Indeed, some of the modern card games are uninteresting, and the fact, surprising to him, that time is spent at cards for mere amusement.

Most of the native games are now not generally in use, such as the hoop and pole, various ball games, dice, with the exception of stick dice, though many again are fond of the moccasin game, and in some districts also of archery. Modern cards have largely displaced these games, though their present knowledge of cards is limited to two games, called monte and coon can, at which some are very skilled.

Native games, as a rule, are surrounded with legendary accounts, called bási hanf', legends of games, in which the origin of the game and its rules are laid down.

bás, the games in general.

bási hanf', the legends of
the games.

dákha, a square, the play-
ing card.

qa't'níli, which are drawn

out, from the manner in which
the cards are turned up in the
game of monte.

(nezná) dāhijf, the (ten) cards
are held, the game of coon
can.

The names for the cards and spots are mostly corrupted Spanish words:

básdös, clubs.

óla, diamonds.

sbáda, spades.

góbás, hearts.

ás, the ace; ás ésbáda, the ace of spades; ás básdös, ace of clubs, and so on for the other spots.

al dós (akdós), the two spot.

tqá'igi (sbáda), the three (of spades).

dfigi, the four spot.

ashdlá'igi, the five spot.

hastqánigi, the six spot, or sés (esbáda), the six (of spades).

tsöstsédigí, or séde, the seven spot.

Eight to ten are missing in these two games, hence they are not mentioned.

sóda, the jack.

h (sbáda), the queen (of spades).

zhē, the king.

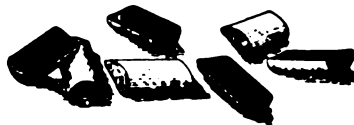
óla dákhád, I played out diamonds.

óla fshá, I made diamonds (I am playing for a diamond run).

GAMES OF DICE.

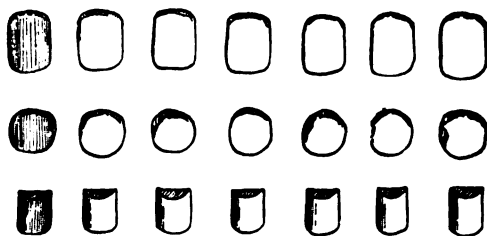
The game of dice known as dákhá tsostsédi, or seven card, is not in vogue at present, but is mentioned frequently in the legends as the pastime of the Holy People. In earlier days various sets of these dice were carried in the leather shoulder pouch, which to-day is used for tobacco and other trifles, and the basket used in shaking the dice was carried below the arm.

The dice were cut of mountain mahogany or black greasewood twigs, about the length of the second joint of the index finger, say an inch long by one-quarter inch wide, and the stick flattened on one side. Usually, however, they were made in the shape of a disk, about one-half inch in diameter. The set consisted of seven chips, six of which



Dice.

were colored black on one side, and white, or the natural color of the wood, on the other, while the seventh was colored black on one and red on the other side. These seven were shaken in the basket and thrown upward, with the winning count as follows: Six white and the seventh red is designated *hogá*, all white, and wins (*niibf*); six black and the seventh red also wins, and is called *bichf*, the red's (count). Likewise, six black with red down (or seven black) is *hochf*, all red, and a winning count, just



Dice.

as six white and the red down (or six white and one black) is *bichf*, the red's (count), and wins. Other combinations of white, red and black did not score.

The number of points was decided before the game unless one wished to stake his fortune on a single throw.

Another game of dice was called *ashbfĩ* and was played with four rounded (*nfyis*) sticks, each four fingers wide (or long). One end or tip of the sticks was colored black and the stick was known by the color next to the tip. The body of the sticks was painted yellow and blue, blue and yellow, white and red, red and white, respectively. These sticks were thrust against a blanket suspended above the players, the first two sticks being thrown in succession by either opponent, and the final two together. In rebounding from the blanket the sticks fell into a basket filled with sand, which accounts for the name, *ashbfĩ*, it falls heavily (and does not move on the sand). Counts were made only when the sticks were crossed in falling, as remarks like

these indicate: "shi akhá, I'm on top," or "ni ayá shi akhá, you're below, I'm on top." When unsuccessful the verdict was: "ála aqilndesdlf, they are side by side," or "adzí, missed." This throwing was continued until a point was scored by crossing the opponent's stick.

A variant of the preceding game owes its various designations to the dice employed, being known as *nézhi*, *wózhi*, *tqéli* and *tsfi*. These were four sticks or dice four fingers wide (long), two of which, *nézhi* and *tqéli*, were flat, the other two round. *nézhi* was the "white stick;" *wózhi*, black on the front with blue rear; *tqéli*, "the one with the breast," because of its black front with a flattened back, and *tsfi*, "the one with the head," which was black, the body or lower part of the stick being colored blue. The dice were distributed, each opponent taking a round and a flattened one. These were shaken in a basket and thrust against the suspended blanket and caught in the basket again, the object being to have them crossed in falling, as in the preceding game.

tsfi bánditāsh, let us play the black head, and so on of the other sticks.

A game of stick dice is frequently played by Navaho women around a circle of forty stones. Three billets of wood are thrown upon a flat stone in the center of this circle, so that they will rebound from a suspended blanket and fall within the circle around which the gamblers are seated. Small twigs placed between the stones are used as counters, and moved back and forth according to the fortunes of the game. The winning count is forty, the winner taking the stakes deposited under the stone in the center. The circle is divided into four groups of ten each, with an opening left between, or at the cardinal points, and the scoring twigs are placed at the opening next to the player. The billets may be flattened on one side and rounded on the other, or slightly rounded on both sides, in which case they are colored with two and three black bands in water color to distinguish them. Accordingly, when all flat sides are turned

up, the count is five points, while all round sides up scores ten counts. Similarly, all three bands up count ten, all two bands



Bouncing Stick Game.

count five; one two band with two three band, or *vice versa*, count three, etc. Points are lost by dropping the sticks outside the stone circle.

The game is not played after sunset, and is a woman's game.

tsídīl (from tsīn dīl, stick rebounds), stick dice. Some also use tsédīl, but incorrectly. tsénastī', circle of stones.

tsīn, the billet, or stick dice.

qāātqīn, the opening in the circle.

HOOP AND POLE.

A favorite pastime of the Navaho, which at present is rarely witnessed, was the hoop and pole game. The hoop was wound with hide or buckskin, and ranged from one to six and a half inches in diameter. It was rolled over a course east and west, and the pole thrust at it when in



Hoop.

motion in an effort to pierce the opening. The pole was decorated with thongs of buckskin, and counts were taken as these strings, called turkey feet, lay across the hoop. The number of points to be scored was decided upon before the game. The following names show the variety of poles used.

nă'āzhózh, it is bridged, the pole, the game of hoop and pole.

nă'āzhózh aqádestlóni, the pole which is lashed together, when two sticks were lashed with buckskin.

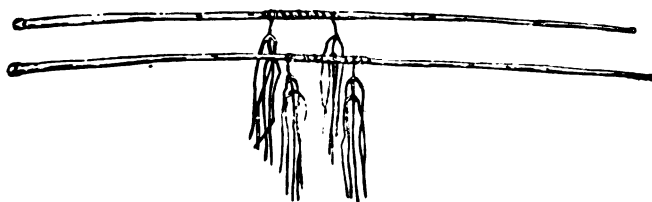
nă'āzhózh dikhó'i, the polished or slick pole, a single stick with a single buckskin thong attached to the grip, or butt end, with two thongs secured at the tip, or striking end.



Pole.

nă'āzhózh ditlōi, the fluffy pole, which was profusely decorated with thongs and claws of various animals.

nă'āzhózh dikhó', the smooth pole. This was a small stick about the length of an arm, and the hoop used with it was simi-



Pole.

larly small in size, only an inch in diameter. This hoop was trundled toward a marked line, while the pole was thrust at it in a stooped position.

bās, the hoop.

tqázhe khē, the turkey feet, buckskin thongs in center of pole.

bi'kfdesdíz, the lashed pole, the buckskin lashed around the two sticks.

hálat'ól, the hand string, attached to the butt end, or handle.

akhálat'ól, the striking cord at the tip of the pole.

BALL RACE.

The game of ball race was played in the cooler seasons of spring and fall, but has now practically disappeared. It consisted in kicking a small round stick over a course previously agreed upon by the contesting parties. Usually the best runners were selected by both parties, as a distance of some miles was ordinarily stipulated. The stick must be kicked and touched only with the foot, so that in the event of its falling into a brush of cactus, the foot must be used in removing it. Should the leading runner miss a kick his partner, or partners, strove to pass it to him in running, the object being to reach the opposite goal first. The runners always stripped to the breechcloth, as is done in foot racing to-day.

Horse and foot racing have long since displaced the ball race. Chicken pulling, too, is a sport much enjoyed by the Navaho. It is given by the traders, who offer prizes of five and ten dollars to the horseman who succeeds in extricating a live or dead chicken, or dummy, buried in the ground. The riders gallop at full speed, leaning over the saddle, and endeavor to jerk the chicken from its grave. The victor must return the trophy to the patron of the sport, an effort which usually ends in a lively scrimmage.

ó'ól'is, ball race, also called fdi'és.

ó'ól'is bânaldél, they played ball race.

nahóqai, chicken, the chicken pulling.

BALL GAME.

The American game of baseball is at present known as aqæ-jólyedi, the rounding, or running around, a name which was

given to a game of ball still played some twenty years ago, and similar to baseball. This game was played on a field with four bases laid out in the form of a square. The bat used was the curved shinny stick held at the knotty end. The ball was made of the soft cliff-rose bark, or rags, covered with buckskin, horse-hide or goatskin. The pitcher threw, or rather bowled, the ball to the batter, the catcher returning it. Four strikes were allowed the individual batter after which the side was retired. Several batsmen might oppose the pitcher simultaneously and strike at the ball from either side, or in the event of two or three strikes, the batter may retire and await a better opportunity to hit the ball. If successful, the batsman ran to the base at the east corner, from which point he completed the circuit by way of the south, west and north bases. The basemen and fielders stationed between the bases must gather the batted ball and strike the runner, or touch him with it while running to a base. The runner might dodge, jump or leave the base line at will to avoid being struck or touched with the ball, in which event the side was retired. At present this game is not played.



Ball.

aqæjôlyedi, ball game.

joł, a ball.

azhí', the bark.

awætsäl, cliff-rose.

beăkháli, the bat.

ná'ilyēd, the goal, the north base.

alchī'náālnī', the pitcher.

HIDDEN BALL GAME.

The game of hiding the ball is better known as the moccasin game from the important part which the moccasin plays in it. It furnishes an innocent pastime for the long winter months, and is played only at night in that season. According to legendary accounts it was first played by the people (or animals) of the day and night for the purpose of deciding whether a difference between

day and night should exist. As the contest was interrupted by the rise of dawn and the sun, the question was never settled, in consequence of which the night always succeeds the day.

The chief features of the game are the burying of four moccasins, allowing only the tip of their uppers to extend above the ground. A small pebble is hidden in one of the moccasins, and its presence guessed at by the opposing party, who win or lose as they succeed or fail in locating it. One hundred and two sticks are used in counting, the total number of which must be won by one of the parties before the stake can be gathered in.

The various details of the game are well established and very numerous. To preclude fraud, for instance, the moccasins are exchanged, and placed alternately in a line running east and west, so that no two moccasins belonging to one set of players are set side by side. To decide the "ins," or first chance at hiding the ball, a bicolored stick, or a playing card, or a coin, is tossed in the air, each party selecting its color previously. The winners then conceal their movements behind a blanket curtain, and hide the ball in one of the moccasins, after which all are covered and tightly packed with dirt. A small stick, about eight inches long, is used as an indicator in striking the moccasin. Three chances are allowed, the moccasin struck being unearthed after each guess to show that it is empty. When the player has staked all chances on one guess only, he loses ten points if unsuccessful. This method, however, is not often resorted to, as it is reckless gambling. Usually two and three chances are taken, and the counts vary accordingly, six points being lost for two, and four points for every three unsuccessful attempts. The ball remains in possession until the opposing team succeeds in locating it, when the same process is repeated by the winner until one of the two teams has lost all of one hundred and two counters. As the counts of four, six and ten will even up at a hundred, the remaining two strips are given the value of these three counts, or as much as may be desired, so that they equal either four, six or ten counts, as the player

stakes his fortune on one, two or three chances. These two counters are called the grandmothers, while the others have no names. The counters are made of yucca, the broad leaf of which is cut into narrow strands. The stake ranges from twenty-five cents upward, and it is not unusual that a whole night is spent on one single game. If at dawn the game is called, the stake is returned to the owner, but if it is decided to finish the game after sunrise, the players must paint their faces black by running a line with charcoal just below the eyes, as is prescribed by the legend.

This game may be played during the intervals of any ceremony, excepting that of the renewal (hózhǒji), and is interrupted only in the course of actual singing or sand painting.

WORDS.

khěshjě (or khě shijě, the moccasins are lined up), the moccasin game.

chiěætqīn, the doorway, the moccasin next to the door.

chiěætqīn bâ, the one next to the doorway moccasin.

ntsftlǎ', the base of the west pole of the hogan, the moccasin west.

ntsftlǎ'bâ, the one next to the west moccasin.

khěfǎs, shoe strings, coun-

ters made of yucca.

tqolashtǒshi, which glides away, the ball.

bediltsfīi, the striker or indicator.

yá'iltě', it is tossed up, the stick, card or coin used for this purpose.

khushdǎ, it's here!

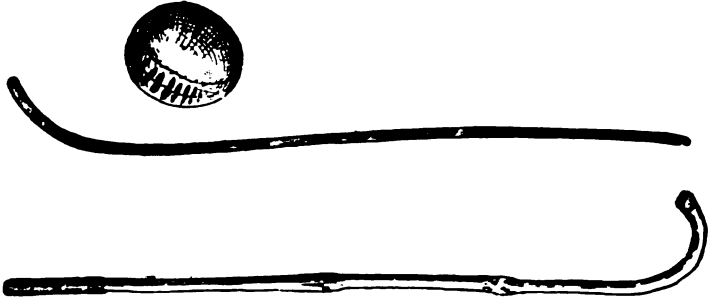
biyf ádin, it isn't here!

bichú'i, the grandmothers, two counters which are always played last.

SHINNY.

The game of shinny is mentioned in some legends as played by the divinities, but is not often witnessed at present. The object was to put the ball over an opponent's line previously agreed upon. A bag-shaped ball, sometimes enclosing a smaller

one of buckskin, was used, and the ball struck with the curved end of a stick or bat. It is still played by school children, in



Shinny Sticks and Ball.

addition to such modern games as marbles, top spinning, and the like.

ndashdilkháł, shinny.
jol, the ball.

beákháli, the shinny
stick.

ARCHERY.

The game of shooting at an arrow is still in vogue in some districts. Another method of playing it, but which has now entirely disappeared, was called "shooting at the yucca." A ball was made of bark and wound with yucca to which a stick of scrub-oak was attached by means of a yucca cord to give momentum to the light ball. This was thrown in the air and the archers discharged their arrows at it as soon as the ball was drawn downward by the weight of the stick.

sázi' oldó, shooting at the arrow.

nadishéó' (nadíshéó', nadídeshéó'), I play arrow shooting.

THE CAT'S CRADLE.

The cat's cradle is played by children during the winter months when the Spider People, to whom it is attributed, are at

rest. Its object is ostensibly to educate the children by riveting their attention, and to supply them with an innocent occupation.

na'ätłó, the cat's cradle
(ná'ashtłó, I weave continuously).

The figures made are usually those of constellations:

sôtso, morning or evening star, or one of the first magnitude.

hastqfn sákaf, feet ajar.

dilyéhe, Pleiades.

sô lani, many stars.

sôhótai, pinching stars.

sô bidé hulóni, the horned star.

Or figures of animals:

tłish, snake.

má'i, coyote.

má'i altsáyilághúli, coyotes running in opposite directions.

nashúí dicłifzhi, horned toad.

néeshjá, the owl.

And other figures:

atsfntłish, zigzag lightning.

altqf, bow.

kā', arrow.

kös'ishchfn, cloud effect.

at'ó', nest.

hoghán dalaf sá'á, a single hogan.

altsáhoghán, double hogan.

diné, a man.

chfzh joyéli, wood carrier.

sís, a woman's belt.

lésis, small stomach of a sheep.

áyfd, sternum with ribs.

whó sēzfni, a standing tooth.

whóshiyfshi, a bent tooth.

SOCIAL CUSTOMS.

BARTER.

An extensive trade was carried on in the early days with the Pueblo and other neighboring tribes, as well as with the Mexicans later on, and consisted chiefly in exchanging the scrapes and saddle blankets for buffalo robes, bridles, beads and turquoise. The value of money was not known, and its use in trade

probably dates back to the early sixties, or the time of the civil war, as would appear from the old five and ten cent paper notes, the names for which have survived in those for the nickel and dime of the present day. Subsequently, constant intercourse and trade with the Mexicans made the introduction of coins very general, so that it is not surprising that the names for the coins are borrowed and corrupted from the Spanish. At present money has set the standard of value for everything purchased. Still, beads and turquoise are frequently exchanged for cattle, deer-skins, blankets, etc., which are estimated according to quality. The ancient custom of exacting a stipulated ransom for a criminal offense against a clansman is still in vogue.

As a rule the Navaho is a liberal spender, and by no means slow in driving a good bargain. The native products, as wool, cattle, sheep, piñon nuts, silverware, blankets, baskets, etc., are at present easily exchanged at the various trading posts of the country for money, merchandise, and foreign products generally.

nalyé báhoghän, a store.

nalyé yá sädáhi, a trader.

COIN.

Coin and paper money are now quite general and are carried in modern pocketbooks, or in the belt, or wrapped and tied in a strip of calico and carried in the pocket. Larger amounts are frequently buried in the ground for greater security. Silver dollars are preferred to paper notes, as the Navaho are not familiar with the respective value of the latter unless it be pointed out to them.

sentáo (Sp. centavo), a one cent piece.

Ítso, a nickel or five cent piece. Literally, the yellow paper referring to the old five cent paper note.

dałaf dotłísh, a dime, or ten cent piece. Originally the blue ten cent paper note.

dałaf yál (Sp. un real), twelve cents. At present this expression is rarely used, though formerly it was frequently a substitute for the present dime, and an equivalent for it.

gfnisi (Sp. quinze), fifteen cents.

nakhi yāl (Sp. dos reales), two bits, or twenty-five cents.

Similarly, dī yāl, four bits, or the half-dollar; hastqā yāl, six bits, or seventy-five cents.

béso (Sp. peso), one dollar, though: neznā yāl, ten bits, or a dollar and a quarter; nakhidzāda yāl, twelve bits, or a dollar and a half, but béso dóbā'ā hastqā yāl, one dollar and six bits, or a dollar and seventy-five cents, while béso dóbā'ā nakhi yāl, a dollar and two bits, is also used for a dollar and twenty-five cents.

nakhi dotlsh (two blue ones), twenty cents, and so on with three, four, etc., dimes, excepting the half-dollars, etc., as noted above. Similarly with the dollars, as nakhi béso dóbā'ā hastqā yāl, two dollars and seventy-five cents.

The five dollar note is sometimes designated as ashdláigi, a fiver, the others as neznānigi, a ten, and nadfnigi, a twenty dollar note. These are also used to designate the gold coins (ōla, gold).

Small change in dimes and nickels, quarters and half-dollars, are frequently designated by yāl (yāligi), as yāl ādīn, I have no small change.

Private coin, such as is used by some traders, is called besh tāhi, small or chipped money, or béso bisgā, dried or evaporated money, or beshkhāgi, leather money.

nahashnī (nahālnī, nāhidesh-nī), I purchase, buy or sell it.

nāyisnī, he bought or sold it.

do-nahanfda, they don't sell here, this is not a store,

bā'ilf (bā'āzlī, bā'ādolet), it costs so and so.

qāgō bā'ilf, what is the price of it?

dukwi bā'āzlī, what did you pay for it? what did it cost?

do-ilīda, it is worthless, or too cheap.

ashdlā bā'ilfnigi nsfn, I want something costing five dollars.

dukwi idzī, how much have I left?

nakhi yāl idzī, there are still twenty-five cents due you.

atsā'ilé, he bleeds a person (for money), one who extorts money.

haná be asht'ē'nbfnshyēsh, I looked the goods over, I get prices or quotations on goods, as, akhál yistlé asht'ē'nbfnshyēsh (asht'ē'nbfnshyēsh, asht'ē'nbfnshyēsh), I priced a pair of leggings (but did not buy them).

atsá'ishlé (atsá'iyélá, atsá-

diyeshlé), I extort money.

álá halé', united, clubbing together in payment for a thing.

niqinānīdé, or binānīdé (binānīdé, binādnodá'), we cleared this on the transaction, or t'óóqoyüi dááqideshchí (nt'é), the yield was plentiful.

BEGGING.

The professional beggar is unknown to the Navaho, and instances in which an individual makes a livelihood by begging from his tribesmen are indeed few. Assistance is offered to unfortunate paupers, while no attention is paid to the idler.

Acquaintance and friendship with whites offers many facilities for asking favors and accommodations.

adókhēdi, a beggar.

adóshkhēd (adéshkhēd, adí-déshkhēd), I beg unceasingly (a person who does not hesitate to ask another for the use of anything, such as for money, a wagon, horse, etc.)

tqé'í' bakháé, and tqé'í' bá'ád, poverty and misery personified, male and female.

tqé'í' báqodishchí, he was born to be poor, one who lives from hand to mouth.

tqé'í' qúyē, he is noted for his poverty.

bíl qúyē, he is noted for his sleepiness and laziness, he can boast of nothing but poverty and sleep.

BORROWING.

People borrow extensively from one another. An excessive interest is charged on loans of money, the usual rate being up to twenty-five cents per month on the dollar. A horse, belt, bridle, bracelet, or anything of value, is offered in security and forfeited in default of payment. The Navaho lender is usually

inexorable, and always claims the security at the expiration of the time limit.

To obtain money and merchandise much of their silver- and ornamental ware is pawned at the stores for a limited number of days. A reasonable interest is charged with a security, often none at all, so that pawning with the trader is usually preferred.

shahāntsé, trust me for this!
(from nahastsé, nahátsí, nahadestsí, I trust you).

shahá'á' (nahál'á', nt'é), I owe him (or you).

shahájíl (pr. shahajíl, sháha-dojíl), he advanced to me.

atséd ish'í (nt'é), I borrow it.

do shída, it is not mine.

atsé it'é, it is borrowed.

atsé nash'á (nsá'á, nash'ádo, or ndesh'ál), I borrow (a dollar or wagon, etc.) Other roots are similarly used: atsé nashtqé, I borrow a horse; nashtqí, a shovel; nastsós, a saddle blanket; nashlé, a rope; nashjá, grain; nashníl, several objects, etc.

atsé na'nsh'á, I lend you a dollar, or simply, na'nsh'á (na'ná'á, nádesh'ál), I lend you a saddle. (See *infra* for other roots.)

nansh'á (náná'á, nádesh'ál), I give you a dollar (see other roots below).

inóltqâ'í, added to it, interest.

nāinā' idestsól, I'll charge you this rate of interest (from nāinā' istsód, nāinā' íltsód, nāinā' idestsól).

nanádeshdlél, I'll pay you this interest (form naná'nshdlé, naná'nshdlá, nanádeshdlél, I pay you in return).

naná'nsh'á (nanáná'á, nándesh'ál), I return the saddle to you. (For other roots cf. pawn *infra*.)

á'nahazlá, or á'ázláigi, or á'selá, or á'nábazníl, pawned goods.

á'nnshté (á'núllá, á'ndeshlél), I place a rope or strand of beads in pawn.

á'nnshtqí (á'núltqâ, á'ndesh-tqíl), I pawn my wristlet (shiké'ó'), or hatband.

á'nnsht'á (á'nná'á, á'ndesh'ál), I pawn my saddle.

á'nnshtqé (á'núltqí, á'ndesh-tqél), I pawn my horse.

â'nnsôs (â'nñtsôs, â'ndes-
tsôs), I pawn my saddle blanket.

â'nnsjhâ (â'nâjâ, â'ndeshjâ),
I pawn my bow and arrow
(kâ', altqf).

â'nnsnîl (â'nñnîl, â'ndesh-
nîl), I pawn my beads.

nâ'nnsnlê, I pawn a rope to
you, etc. of the other roots, as
in the preceding examples.

ndîzîd bahaz'â, or ndîzîd
bânahunâ'â' (nt'ê), it is in pawn
for a month.

qîl basâ'â, it is in pawn for
a time (or, for instance, he is
in jail for a certain length of
time).

dukwish qîl bânîná'â, for
how many days did you put
it in pawn?

qîl bânâ'â (bânîná'â), I
pawn it for so many days.

qîl yânnâ'â, he gave him so
many days on it.

æ'æ'â, or bæ'æ'â, it's sun
has set, the pawn is run out.

yō æ'æ'esh'â (æ'i'f'â, æ'idesh-
'â), I lost my pawned beads, or

yō bæ'æ'esh'â, time is up
on my beads, or

sitsâ æ'æ'â (sitsâ æ'i'f'â,
sitsâ æ'ido'â), or sitsâ bæ'æ'â
(sitsâ bæ'i'f'â, sitsâ bæ'ido'â),
my time is up.

baghânâhofâ' (baghânâhofâ,
baghânâhodotâ), I extend the
time on a pawn.

qîl baghânâfâ' (baghânâfâ,
baghândotâ), I received a few
more days on my pawn, or

qîl bînetâ' (bînetâ, biné-
dotâ), time was extended.

qâ'âshdlê (qâ'âshdlâ, qâ'â-
deshdlê), I redeem anything
(out of pawn).

yō qanâshdle (qanâshdlâ,
qândeshdlê), I redeem my
beads, or a whip, etc. (Cf.
other roots, with tqîl, â, tqê,
nîl, etc.)

ôkhûi dîna'â, or baghâoz'â,
the sun is at or beyond the
point stipulated, that is, a
debt is due now.

ânchqf', he is close, he will
exact a debt, he will not
extend the time.

do-bîfesh'âda, I can not
afford to pay.

tâakhi hodlâa adishnî (adf-
nîd, adîdeshnî), I granted a
loan gratis, as tsî nabâs shadf-
â, lend me a wagon, or hî
shadîltqel, lend me a horse;
tâakhi hodlâa ndishnî, you
may have it (or, I tell you
that you may have it without
paying for it, but return it to
me afterwards).

tšakhi hodlāa shidiní, lend
me this, let me use it?

ānshchí' (n'tšé), I can not
or will not part with it, hence,
ānchí', he is stingy.

BUGABOOS.

Insubordinate children were formerly subdued by the use of the bugaboo, four of which were attached to a beam of the hogan. They were made of sumac



Bugaboo Owl.

(kī, chīlchīn), and in shape like that of the accompanying illustrations. The owls (nāshjā), as they were called, were usually hung up in the evening when, favored by the scant illumination of the hogan, the fancy of a child might easily be led to believe that the owl sitting there should carry it off. Frequent mention of the owl as the mischievous spirit of the legends fostered this belief. The



bugaboo is at present rarely seen. *Bugaboo Owl.*

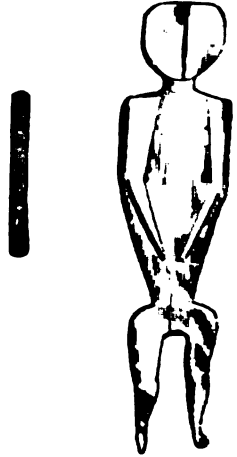
Similar allusions were made to the legendary yēitso, or yēī lābā'i, big or gray gods, cannibals, who preyed upon small children. A survival is probably found in the expression, dolkół, squeeze, whenever a child is in danger.

By way of hyperbole a foolish child or person is often called nāshjā (nāshjā), owl, or nāshjātso, big owl, as this bird is a good figure of stupidity. digīs tso, you big dunce, or yēitso, or yēitso lābā', you big gray fool, are used on similar occasions, because the yēitso, or yēī lābā'i, gray gods, figure as very awkward persons in the legends, and are now given the role of clowns and dunces among the personators at dances.

CARVING.

The Navaho do not practice carving in either stone or wood, nor do they represent their deities in effigy for the amusement of

their children, or similar purposes. Dolls and images of some animals, however, are at times carved in cottonwood for ceremonial purposes, which suggests a possible motive for the social taboo placed on some of them. When the death of a snake, a duck, a chicken, a bear, a dog, or a pig, and of a child, has been witnessed by a pregnant woman, or by her husband during her pregnancy, or have been at any time killed by them, and subsequently indisposition and sickness overtakes the woman or her offspring, a singer is called upon to remove such a cause by performing certain features of a given rite over her. In the snake rite (*nałóye bakháji*), for instance, the singer carves the image of the species of snake, the rattler, for instance, which presumably has caused the sickness, and after placing it on the affected parts of the patient's body, the image is deposited into the hole of that snake, together with the prayerstick made for it. Similarly, the image of the bear is deposited in the den of a bear, and that of a coyote into the coyote's den. The image of the dog is carried to an open field, barren of brush and tree, which has not been used as a thoroughfare (*qadoholtéji*, or *kfhunezłáji*, an open field). Here it is placed on the ground with the snout pointing in the direction of *tséyí'í*, a cañon near Los Torreones. The *awéshchín*, or dolls, the *bisódě*, pig, *mósi*, the cat, and *nahóqai*, the chicken, are deposited in any of the numerous cliff dwellings or ruins (*níyá'kēd*, *níyá'kēgo*, underground place) with which the Navaho country abounds. The prayers accompanying the application of these four images are recited in a foreign language, but the fact that descendants of Hopi clans are usually called upon to make



Doll.



Duck.

the dolls and images, and recite the prayers, would suggest that the language and the custom itself, as adapted to the Navaho, is of recent introduction and of Hopi origin. The accompanying illustrations represent the doll and duck with their prayersticks.

awéshchīn, a Hopi doll.

tłish qadalt'ēgo, the likeness of a snake. Similarly, shāsh, bisódě, łechāi qadalt'ēgo, etc.

tłish qadalt'ē ajdlē, the image of a snake is made (at the ceremony).

nlyakeji, depository in a cliff dwelling.

COUGHING AND SNEEZING.

Coughing and sneezing are often indications of a cold or indisposition.

diskhós (nt'ě), I cough.

diskhós (dfskhós, dīdeskhós), I cough.

dokhós, a cough.

dokhós shildilné' (shfdolnă', shfdīdolnă'), I have a cold.

hadfskhes (hádeskhēz, hádideskhós), I cough (out).

ádiqāhodishkhô (nt'ě), I hawk.

chátłish (chátłish), phlegm.

hatsfyādishnf (hatsfyādfnīd, hatsfyā dideshnīl), I sneeze.

SPITTING.

People spit anywhere. Ordinarily no significance attaches to spitting, but at times the leaves of cedar or juniper are chewed and spit out for better luck, as, for instance, into the face of a balky burro. Medicines are often sputtered over the paraphernalia and the patient during some ceremonies. On the other hand, it is reprehensible to wash beads destined for the grave with water poured from the mouth. Spitting of blood is usually cause for alarm.

WORDS.

shē, spittle.

adishē (adīzhē, ádīdeshá') I expectorate, spit.

shizhē dishťō' (ntšē), I expectorate skillfully (without spraying).

shizhē dishchīl (ntšē), I send it in a streak, or puff it out.

shizhē bedīsōl (bedēyōl, bedīdēsōl), I sputter.

dīshā' (ntšē), I sputter upon.

(hanfji) nānsōl (nanēyōl, ndinēsōl), I blow (it) into his face.

chátł'ish qahidísó, expectorate phlegm.

gād benáhunsōl (nahunēyōl, nahudīnesōl), I sprinkle with juniper.

dīl habfhidiskhēs (habfhidiskhes, habfhidokhōs), I spit (cough) blood.

dīl qāhīdīsó (qahidézo, qāhidīdesōl), I expectorate blood (in clots).

dīl qāhidishē (qahidēzbē, qahidīdeshā'), I spit blood.

dīl qāhidistsōs (qahidétsōs, qāhidīdestsós), I spit (extract) blood.

nāshkhūi (nsékhūi, ndeshkhō), I vomit.

FLAGELLATION.

Children are rarely chastised, but generally treated with considerate kindness and affection by both father and mother.

Flagellation usually occurs at the ceremony of initiation during the night chant when, on the day preceding the public dance, or the second last day of the chant, the two personators of yéibichai, or hashché dódi, and of hashchéba'ād, appear, to allow the uninitiated to *see the gods*. Each individual Navaho, whether boy or girl, should be initiated four times in life, twice at night, and twice at daytime. As the initiation consists in looking upon the masks and personators it follows that four different sets of masks must be seen to comply with this duty, and viewing the same set at four different chants or occasions is not sufficient. As the same set of masks, however, is used frequently, it is not unusual that some time elapses before an opportunity is had of seeing four different sets. Accordingly, many are advanced in

years before this is done. The practice presumably stimulates respect for holy things, as children below six and seven years are not permitted to witness the ceremony. At home they are often told that the *yéi*, or personators at a dance, are living gods, which illusion is removed as soon as they are able to speak coherently. On the day mentioned the two gods are asked to whip the children brought for initiation. The boys strip to the breechcloth and line up in a row, while the girls take position behind them. All are told not to look up, but to await events with downcast eyes. The *yéibichai* then approaches each one individually, each boy and girl rising in turn, and sprinkles their shins, legs, front and back over each shoulder, and their outstretched arms, with pollen, after which the Female God lashes each child right and left over the parts strewn with pollen, accompanying each stroke of the yucca lash with his usual cry of *wu'ú*. This lashing is the occasion of much bantering and laughter by the audience, who petition for hard or light strokes, as they wish the novice to be punished. The hard stroke calls for its reverse, and is usually followed by a mere tap, while the light stroke is brought down with all force available.

The girls, however, are not whipped. Instead, the Whipping God presses an ear of white and yellow corn, wrapped with spruce, against the soles of their feet, the shins, legs, breast, back, shoulders, arms, and forehead, accompanying each pressure with his customary cry. Thereupon the personators remove their masks, and the *yeiba'ad* then holds his half-mask to each and every child, fitting it to their eyes with his usual call. This done, all are told to look up, and never to forget the gods—when they behold the smiling faces of two well-known Navaho. The ceremony is then closed with the sprinkling of pollen upon the masks, which each boy and girl does by dropping the pollen over the center of the face, around the eyes and mouth of the mask. All are then admonished not to betray what they have seen to the uninitiated.

A repetition of this takes place at night inside the hogan for

such as lack one of four initiations. The initiated are excluded from this ceremony (in the evening).

WORDS.

yéi dadzĩłtsé, they see the yei, looking at the gods, the initiation.

yéibichai, the grandfather of the yei, who is also called

hashchě dōdi, from his call, dō, dō, though some hold that the tqónenfli, or water sprinkler, performs the whipping.

hashchě bā'ád, or yéibā'ád, the female god, who is impersonated by a man.

béetsqís, the lash, which is made of yucca strips (tsāzĩ).

ádistsqís (nťé), I whip him.

yéi yisf (yfsĩ, yidosf), or yeisf, the initiated, one who knows the yei.

yéi qasf, or hodzisf (hósĩ, hodosf), he knows the yei, he is initiated.

yéi bitsókhě, the grandchildren of the yei (the children at actual initiation).

jĩsh banádajĩłnĩ (banádajĩłnĩ, banádashdiyolnĩ), the masks are sprinkled.

jĩsh banáishnĩ (banáiyélnĩ, banádiyeshnĩ), I sprinkle pollen upon the masks.

yádidi'nĩł dajĩłchf (dajĩłchf, dazhdolchf), the incense is inhaled (in connection with the sprinkling of pollen).

yádidi'nĩł yishchf (yishchf, deshchf), I inhale (smell) the incense.

yégo nánłtsqís, strike him hard!

hazhōgo nánłtsqís, strike him lightly (tap him only).

yéi'āsh, the two yei appear, that is, the second last day of the chant.

GAPING.

Gaping indicates sleepiness and weariness. The night is frequently spent in amusement, conversation, or attending some ceremony, and it is not unusual that two, three and more nights succeed each other in this manner. The loss of sleep is sometimes made up for during the day, though as a rule the day is not spent in sleeping. Ordinarily, too, the family rises at dawn or sunrise, and retires after dark.

WORDS.

údishchǎ' (ndishchē) nt'é, I
gasp, yawn.

bílnsín (bílmízf, bíldfnesíł),
I am sleepy.

bíl, sleepiness, drowsiness.

nāānāshghūsh (nt'é), I fall
asleep, I nod.

nā'e'eshqāsh (nā'í'fīqāsh, nai-
deshqūsh), I nod, fall asleep.

áshqush (nt'é), I sleep.

ishqāsh (fīqāzh, ídeshqush),
I sleep.

(atsé) ānshyíl (áneshyíl,

adfneshyíl), I take a nap.

tsé'nsdzíd (tséensdzíd, tsé-
desdzíl), I wake up.

nā'ishghāsh (nā'ishghāzh,
nā'ideshwhūsh), I fall asleep
again.

ndí'nishghūsh (nt'é), I sleep
sound, I sleep far into the
morning.

ndishdǎ (ndísdzá', ndídes-
dál), I get up, arise.

ndish'né (ndish'nǎ', ndídes-
'nǎ'), I crawl out, arise.

DREAMS.

No special significance attaches to snoring, or talking and walking in sleep, but bad dreams usually indicate some evil influence, for which a remedy is sought in the renewal ceremony. A good dream portends nothing evil.

WORDS.

ashqǎ (fīqǎ, ádeshqǎł), I
snore.

nādīlgáshi, a sleepwalker.

nādishgāsh (nt'é), I walk in
sleep.

údishgāsh (ndishgāsh, údi-
deshgāsh), I walk or scream
in sleep.

sitsáyáshtqi (nt'é), or sitsá-
yadíshtqi (nt'é), I talk in sleep.

naisél (nayéyēl, na'idésíl), I
dream, have a dream.

shibfł yíchō (yíchqō'), a bad
dream.

shibfł yízhōd, a good dream.

shibfł báhashní' (báqūēshní',
báhodeshní'), or naiséli bá-
hashní', I relate my dream.

shibfł, or naiséli bānahásh-
ní' (banahosísni', banahodésh-
ní'), I relate my dream.

do hozhó ishqušda, I did
not sleep well.

shibfł qishnfsh (qénízh, qí-
deshnish), I do not sleep well
(I am robbed of sleep).

shibfł qíshdlād (qéłdlad,
qídeshdlād), I am disturbed in
my sleep (my sleep is torn
from me).

LATRINES.

The Navaho have no latrines. They urinate anywhere they happen to be, and when sick they defecate on sand carried to the side of the bedding and removed afterwards.

ashłışh (ăshêłîzh, âdeshłîsh), I urinate.	bilfzh, or alfzh, urine. chă, bichă, ordure.
ashchf (ăshêchă, âdeshchf), I defecate.	chă bâhoghăn, latrine, wa- ter-closet (modern).

LAUGHING.

The Navaho laughs when he is pleased and happy, in fact, he is much given to laughter. The object of much of his conversation is to produce laughter, which is true also of the antics of the Water Sprinkler at the night chant, and of much of the legerdemain which formerly was in vogue there.

WORDS.

yishdlô (yîshdlô, deshdlô), I laugh.	lă âst'îl (nt'ê), I do antics. lă ânfni, a joker.
anâshdlô (nt'ê), I laugh aloud.	niyâhodiltqî', funny re- marks.
bâyishdlô (baîshdlô, bâdesh- dlô), I laugh at it.	niyâhodishtqi, or lă dishnf (nt'ê), I make funny remarks.
chîdînshdlô (chîdînshdlô, chîdîdêshdlô), I chuckle to myself.	sizâhalâ' (nt'ê), I mimic. bêinê, with its voice, mim- icry.
dlô nsîn (nt'ê), or bādłunsîn (nt'ê), I smile.	dlô shînâdâ (nt'ê), I chuckle with laughter.
bâshîl hozhó, I am content, happy, or bâshîl nôhohzó, or bâshîl hūnêni (nt'ê), I am happy and content.	dlô shîhîghă (dlô shîhîya, dlô shîdogâ), I roar with laughter.
lă ât'îl, funny things, antics.	bidlô qa'inîl'f (nt'ê), he gig- gles, chuckles.

LYING AND STEALING.

Lying is quite general and is resorted to for almost any trifle. Parents remonstrate with their children for telling the untruth, yet often seek some plausible pretext to cover their own defect. Statements made are often taken for what they are worth, or rather with some suspicion, until they can be verified or disproved, while confidence and candor are always due to well-tried friends. False statements and lies are acknowledged with as equal grace as they are made or told, since that is manly.

Stealing, or rather appropriating loose property, too, should be done in the proper manner. The Navaho, as a rule, is a good thief, or none at all. Hence, one's property is safe with him, whenever he has consented to take its charge.

Property lost is *res derelicta*, and belongs to the finder unless redeemed.

shioch'í (n'áé, or yích'í, yidéshch'í), I tell a lie.

yinshch'í (yích'í, yidéshch'í), I say an untruth, I lie.

do-shioch'í, I tell the truth, I do not lie.

do-dádzai (do-dádzāgi) qashn'í (qūeshn'í, qodeshn'í), I speak the truth, do not utter falsehoods.

ch'óhūish'á' (ch'ohuyé'á, ch'ohodiyesh'á), I tell it, tell the truth.

do dádzāgi ch'ohuish'á' da, I do not speak falsely.

dāāni, it is true (dāni dishn'í, I assert it).

Words with Reference to Stealing.

ānsh'í (ānā'í, adínesh'í), I steal, pilfer, rustle (cattle), etc.

hī nish'í, hī nā'í, hī dínesh'í, I steal or rustle a horse; similarly, bēso (money); yāl (small money); t'ō', (hay); beēldlé (blankets), etc.

alchfn nsh'í, or alchfn yo' ishtqé (yo'íltqí, yoādeshtqé),

I steal, or carry off a child.

ān'íthi, a thief, one who has stolen.

an'íthi bíldishdél (bíldédēl, bíldideshdí), I grab a thief, catch him in the act.

an'íthi qadínsh'í (qadínsh'í, qadidesh'í), I look or hunt for a thief.

hī yō'islōs (yō'flōs, yōādes-lōs), I drive a horse off (take him for another).

hī yō'ish'ésh (yō'fēzh, yōā-desh'ish), I drive a couple of horses away.

hī yōānsōd (yōānfyōd, yōā-dfnesōl), I herd them off.

hī yōānshkhād (yōānflkhād, yōādfneshkhāl), I run a bunch of four and more horses off.

hī yō'nshchqé (yōānflchqā, yōādfneshchqél), I run a number of horses off.

yō'iyā, it went astray, but shayó'ilyēd (shayóēlāghūd,

shayóādolāghūl), it has been driven off (by another).

ndísh'í (ndél'í, ndīdesh'íl), I hide it away, abscond it. such as, hī ndísh'í, I hide a horse off (bēso, money; alchln. children; diné, keep a person hidden; or, bēso lēy'í' ndísh'í, I bury money; or, beēldlē bī ndísh'í, I conceal it under my blanket, etc.)

yā'í'ishníl (yā'iyāníl, yā'idíyēshníl), I put him in, I arrest him.

ya'í'í'níl, a (modern) deputy sheriff.

PROSTITUTION.

As a rule no license is allowed young girls previous to their marriage. Married women frequently offer themselves as they would for a small compensation, though less frequently with the knowledge of their husbands. Some parents offer their daughters to whites in marriage and otherwise.

WORDS.

aljflnī, a prostitute.

khfyā zezfni, a public (American) woman (as seen in our towns).

tlē naghái, busy at night, the prostitute.

ashjfl (nt'é), or khínbâ sézî (nt'é), or tlē nashá (nt'é), I prostitute myself.

ashkēd (asékēd, adeshkíl), I practice fornication.

osh'íl (f'íl, idésh'íl), copulam habere.

yishtqésh (nt'é), rem habere cum muliere.

Similar words are: yishkél (sékēd, deshkil), or aqíshkēd, conjungere; akfnnshqtqé (akfnníshqtqí, akfndeshqtqí), accumbere, or qádinshkí' (qadinéshkēd, qadfneshkíl), or qadinshché (qadinéshchá, qadfneshchá), scortari, scortator.

níl nníshdél (níl nádēl, níl ndeshdíl), rapere (raptus).

SALUTATION.

People do not embrace when meeting each other, though a loving son is often seen to embrace his gray-haired mother. Handshaking appears to be quite general at the present day, while aboriginally an embrace, or a mere exchange of greeting, was the usual form of salutation. The kiss is not traditional, but has been borrowed from the whites.

WORDS.

bináshchíd (binsbéchíd, binádeschchí), I embrace him.

nínáshchíd, I embrace you.

nínáshní (nnásení, nnádeschní), I embrace (squeeze) you.

nzēnāshchíd (nzēséchíd, nzēdeschchí), or nzēnāshní (nzēséní, nzēdeschní), I embrace, or throw my hands around your neck.

azānsht'á' (azānesht'á, azādínesht'ál), I kiss him.

nzānsht'á', I kiss you.

nlákē dishní (nlákē deshní, nlákē dídeschní), I touch your hand, shake hands.

alákē dishní, I shake hands with him.

qālāhanē', qālāhodzā, how do you do, how are you?

SCARIFICATION.

Scarification is practiced by so-called bean shooters in extracting stones, pebbles, and the like, which, presumably, have been injected by witches. A small incision is made with a piece of broken glass and the objectionable particle drawn out by sucking the wound. Body marks and tattooing are not practiced.

WORDS.

aqíhojigyésh (nt'é), he is cut, he cut him.

aqíshidigyésh, I am cut.

aqínshgyésh (aqínfígízh, aqíndeshgísh), I cut you.

aqéeshgyésh (aqí'fígízh, aqí-déshgísh), I cut him.

tqózís, a bottle, piece of glass.

adlígáshi, a bean shooter.

astásós (ĩtsòz, ádestásós), I suck out.

áqâishnîl (aqâyâenîl, áqâdi-yeshnîl), I extract, suck out.

ântf', a witch.

beëdĩlgâshi, the particle injected into the skin.

nishgâsh (nishélgâsh, nidesh-gâsh), I shoot into you.

adishgâsh (nt'é), I shoot into him.

qodishgâsh (nt'é), he shoots into him.

shídishgâsh, he shoots into me.

bikēeshchf (bikfdaashchf), body marks, tattoo.

yishchf (nt'é), I redden myself.

ádishchf (ádeshchf, ádídeschf), or ádeesh'nî (ádisf'nî, ádídes'nî), I paint myself red.

SMOKING.

Smoking is enjoyed by both men and women, and boys early acquire the habit. Smoking figures largely in ceremonies in the shape of a sacrificial cigarette or pipe, which is lighted symbolically with rock crystal. Pipes with and without a stem are mentioned in ceremonies and legends, though the Navaho, with few exceptions, do not use a pipe. Instead, they smoke cigarettes made of foreign tobacco, wrapped in paper or cornhusks. Usually the smoke is inhaled. Chewing, too, has been introduced very recently.

WORDS.

nát'ò', tobacco.

nát'òstsé, a pipe.

naash't'ò' (na'f't'ò', nadesht'ò', or nidesht'ò'), I smoke.

dibishlé (dĩhflă, dīdeshlé), I make a cigarette.

dātā (dātān), cornhusks, cigarette paper.

nát'ò' dīshtlād (dĩtlă', dīdeshtlil), I light a cigarette.

nát'ò' bi'f'isdsi, ready made, bought cigarettes.

sāghālo, (Spanish cigarro). a cigar.

bi'f'ishf (bi'f'zhil, bi'f'ideshf), or bi'f'isdsf (bi'f'ésdsi, bi'f'idesdsi), or bi'f'isól (bi'f'yöl, bi'f'idesól), I inhale, I draw my breath (or smoke) inwardly.

nát'ò' nt'is, (hard tobacco). plug tobacco.

nát'ò' yish'ál, I chew tobacco.

THE TABOO.

The term *bahádẓíd*, "it is feared or injurious," is applied to anything which should be avoided or dreaded as contrary to good tradition.

Fishes (*lō*) and animals living in water (*tqaltfā'dinē'ē'*) are not eaten, though the shell of the turtle (*tsistqél* and *chādagháí*) is used in making beads (*yō*), and the skins (*bakhági*) of the otter (*tqábâhastqín* [*tqábâstqín*]), the beaver (*chā*), and of the muskrat (*tqábâ'má'i*), are used in the make of the headgear. Ducks (*nāl'éli*) are classed with fish. Eggs, too, are not generally eaten.

Custom does not sanction whistling after dark. The singing of some native air takes its place and is recommended to those riding alone after dark, and done in a subdued voice. During the summer months the use of chants and hymns belonging to the winter season is not auspicious. The cat's cradle is made only in the winter months when the spiders are at rest. Similarly, the game of *keshjē* (moccasin game) is consigned to the winter season when the originators of the game, the bear, badger, porcupine, etc., hibernate.

The *bahádẓíd*, or taboo, is also placed upon the narrative of the legends during the summer months, at least of such portions which relate to the emergence and the peoples there, consequently which relate to the thunder, lightning, hawks, etc. Portions of some sand paintings permissible in winter are changed in the summer to avoid the wrath of the holy ones. Similarly, some chants are assigned to the winter months exclusively, the season opening usually after the first frost. This is the case with the night and mountain chants. The novice is, therefor, usually taught during the long winter months. Gambling ceases during the actual ceremony, though it is permitted during the intervals, excepting the *hozhóji*. One should not step on or walk across a sand painting, but walk around it sunwise (*shábiřęgo*), which

should also be observed in entering or leaving the hogan during an actual performance. A nine night ceremony is indefinitely interrupted and postponed upon notice of the (natural or violent) death of a near relative or family member. The deliverance of a wife or daughter also interrupts a chant. An error made by the shaman in the recitation of some of the prayers makes the continuance of the ceremony impossible. The patient should avoid the sight of blood and the killing of animals. A masked personator should not speak when wearing the masks.

Except in the case of serious harm or fatal contingency, a bear, snake, wildcat, coyote or eagle should not be killed, these animals being dispatched in other ways. As a rule a bear is not killed but avoided. The meal consisting of bear meat must be preceded by a ceremony. The eagle was attracted by a bait laid near a pit in which the hunter was concealed. After plucking its feathers the bird was released. A bait attached to the trigger of a rifle by a string is often used in dispatching the eager coyote, while the rattlesnake is avoided or fanned aside. One should never approach, much less touch a carcass (*chīndi*) of any kind. Accordingly, a corpse is touched only when necessity requires, and by persons not belonging to the immediate relationship of the deceased. The burial took place by slaves who were killed over the grave, together with the best horse belonging to the deceased. The house and some of the personal property of a deceased person are destroyed. Instruments used for burial are broken over the grave and left. Pots and cooking utensils are also destroyed. The family of the deceased remains in mourning for four days, abstaining from all unnecessary labor, visits and conversation. In general a corpse is dreaded and not touched, and care is taken to avoid the path from the hogan to the grave.

Labor ceased during the eclipse of the sun, and travel was usually interrupted during such an occurrence. Similarly, the household was aroused from sleep and the passing of the eclipse of the moon watched in silence.

A form of the taboo, but which in some shapes is disappearing, might be described as the fear of greed. While the charitable person lives to a good old age, the miser and hoarder of wealth, who are not open to better promptings, are usually visited with misfortune. The expression, *akezhnīłtʔ*, would seem to signify *he heaped continuously*, and is applied to the inordinate greed for wealth, possessions, family increase, weaving, and uninterrupted chanting. As a rule, therefor, the chanter performed the *hozhoji*, or benediction, for himself in the summer so that he might perform many rites throughout the winter, when he again performs the same rite for protection in the summer. Good authorities would have it that the blanket known as *baghaftłoni*, or the slit-weave, was occasionally woven to prevent the *akéitfo*, or overdone weaving.

Intermarriage between closely related clansmen, as also cohabitation with members of related clans, is not permitted.

The hunt, if it is to be successful, should be conducted according to prescribed ceremonial custom.

WARNING.

A journey is frequently omitted or postponed owing to the belching or noise of the trachea, the noise or the ringing of the ear, all of which are omens of misfortune. From the following expressions it would appear that they are ascribed to the influence of the spirits in the nether worlds.

kāsh, kāsh, it is ground, ground!

shīdolkāzh, (I am being ground), a noise in the trachea.

do-shfnida, do-shfnida, I have no desire, desire! or, *chīndī-tqādi do shfnidāū*, I have no desire to go to hell.

shichʔ dīstāʔ, a noise in my nose; *shijé dolkʔs*, my ear rings.

TRANSPORTATION.

Previous to the introduction of the wagon loads were carried on the horse, or on one's own back, methods which are largely

in use to-day. The burden is usually lashed to the rear of the saddle, or is adjusted on the horse or burro after the manner of pack-saddles. Occasionally the Navaho carry stone and timber on their backs, the load resting upon the loins, the body bent well forward. At times a sling is made of the blanket and the bundle carried over the forehead or chest, in which fashion, too, the women usually carry the wicker bottle. A carrying frame, constructed for temporary use in the early days, is now scarcely remembered, as the carrying basket, or head bag (*tsfzis*), was more convenient. The temporary carrying basket, made of goatskin, for collecting yucca fruit, has been referred to elsewhere, while the mode of carrying infants is fully explained in the article on the cradle. The use of the wagon, too, and most words referring to transportation, will be found under this and the other relevant titles just mentioned. Transportation by water has been mentioned in the list of words referring to water.

At present the Navaho are employed in hauling freight, carrying United States mail, as couriers, etc., and are usually willing to undertake anything for which horse or wagon may be of service.

yishcháł (*nshcháł*, *deshcháł*), I leap, I pack wood under my arm; *qëshchá'* (*qínshchá*, *qídeschá*), I carry it walking, as *tsín beheshchá'*, I carry a log below my arm.

naltsós nāyéhe, a mail carrier. For other words referring to transportation cf. Wagon, Modern Implements, etc.

WEEPING.

Pain, misfortune, and sometimes joy, cause weeping. The sick weep for pain, and, similarly, tears are shed at the death of a friend or relative. The loss of a child is a source of pain and weeping to a mother long after, whereas the meeting of aged parents and children after a long absence brings forth tears of genuine joy.

yishchá' (*yfchá'*, *deshchá'*), I weep.

anáshchá' (nt'é), I weep continuously, loudly.
 tsí'díshchē (tsí'déché', tsí'deshchá'), I weep frequently.
 chādíshwā (chādéshwā, chādideshwā), I whine.
 chādílwā, he whines.
 nchādísí (nchādési, nchādídési), I sob.
 dish'nf (nt'é), I groan.

WHISTLING.

Whistling attracts the spirits, and is therefor avoided after dark. Otherwise, too, it is not generally in vogue. Popular airs, taken from well-known chants, are usually substituted, and are frequently hummed on the return home after dark.

Whistling is done at the war dance, however, and a whistle for the purpose of imitating the cry of the eagle is in use at the bead chant, while another is prescribed for the witch chant (hochóji). The ancient custom of timing the grinding of corn at the war dance by means of a flute made of the stalk of the sunflower, and provided with four keys, is mentioned as a tradition only. The whistle in use at the bead chant is made of the leg bone of a jack-rabbit killed by an eagle. This is spliced, and removing the marrow, a piece of the inner ear of the jack-rabbit is laid between the two pieces of bone and wound with sinew. When dry the whistle produces a shrill, piercing sound.

WORDS.

íłfsól (íłfsól, íłdidesól), I whistle.

nā'íłfsó (nā'ídesó, nā'íłdésó), I whistle.

díłnf', a flute.

dadíłnfntē, they used to play the flute.

ádíłłól, the flute.

ádíshłól (adíłól, ádídeshlól), I play the flute.

ndíyfli, sunflower (stalk of about an arm's length, with four holes for keys).

beétsós, or atsá'zól, the whistle, eagle whistle, used in the bead chant.

atsá'zól beédishnf (beédníd, beédidesh'níł), I call with the whistle (at the bead or witch chant).

gǎ'tso **bikhézhōzh**, jack-rabbit ulna.

gǎ'tso **bijǎ**, the inner part of the ear lobe of jack-rabbit.

tǎin **altqǎ'dīnīlzhōzh**, the bone spliced into with a knife.

altqǎ'dīnīshōsh (**altqǎ'dīnīshōsh**, **altqǎ'dīnēshōsh**), I splice vertically (with a knife).

Similarly, **altqǎ'dīnīshdlǎd** (**altqǎ'dīnīdlǎd**, **altqǎ'dīnēshdlǎd**), I tear vertically.

altqǎ'dīnīshné' (**altqǎ'dīnīshné'**, **altqǎ'dīnēshnīl**), I fell it in two with a knife.

altqǎ'dīnīshkhǎl (**altqǎ'dīnīlkhǎl**, **altqǎ'dīnēshkhǎl**), I chop it in two.

alkīnīshōsh (**alkīnīshōzh**, **alkīdīnēshōsh**), I splice.

alkīnīshné' (**alkīnīshné'**, **alkīdīnēshnīl**), I splice.

alkīnīshkhǎl (**alkīnīlkhǎl**, **alkīdīnēshkhǎl**), I splice.

alkīnīshdlǎd (**alkīnīdlǎd**, **alkīdīnēshdlǎd**), I splice (tear) in two.

naidiso (**nčé**), or **ǎdishnī** (**nčé**), I hum a tune.

INDEX.

ABALONE, 35, 222, 228, 402, 410, 414, 461.
 Abdomen, disease of, 114.
 Abortion, 85, 450.
Abronia, 195.
 Abuse, 444.
 Accident, 110.
 Accoucheur, 107, 450.
Achillea, 185.
Achillea millefolium, 185.
 Acorn, 208, 211.
 Acreage of reservation, 31.
Actinella richardsonii, 185.
Actinella scabiosa, 185.
 Action, words referring to, 91 *et seq.*
 Action in war, 437.
 Additional farm, 350.
 Address, mode of, 120.
 Adobe, 65, 272.
 Adopting clan, 426.
 Adoption, 425, 432.
 Adultery, 439, 443, 440, 450.
 Advice, 441, 448.
 Amiliation of clans, 425.
 Amity, 426.
 Afterbirth, 85.
 Agate, 41, 434.
 Age, in old age walking, 43.
 Age, mode of computing, 59, 77, 82.
 Agency, 259, 423.
 Agent, Indian, 423.
 Agitation, 441.
 Agriculture, 259 *et seq.*, 423.
 Air, 46, 53.
 Alarm, remedy for, 116.
 Alaskan tribes, 28, 30, 30.
 Albino, 81.
 Albrizzo, Jesus, 126.
 Alder, 31, 188, 232, 293, 304, 316.
 Alfalfa, 193.
 Alharia, 189.
 Algonquian, 27.
 Alkali, 65.
Allium, 193.
 Almogen, 63, 210, 231, 461.
Alnus incana, 188, 232.
 Altar, 69.
 Altitude, 32.
 Alum, 63, 231, 275.
 Alum root, 113, 190.
Amarantus albus, 181, 295.
Amarantus blitoides, 181.
Amarantus retrofractus, 182.
 Amassing a fortune, 509.
 Amber, 69, 418.
Ambrosia fragrans, 116.
Amelanchier, 198.
 American, 77, 83, 108, 120, 148, 228, 232, 257, 258, 261, 262, 263, 276, 356, 362, 364, 374, 439, 444, 463, 467, 494.
 American hawk-owl, 158.
 American names for, 120.
 American residents, names for, 120.
Ampelopsis quinquefolia, 201.
 Amputation, 111, 450.
 Amusement, 250, 478, 500.
 Aniline dyes, 229, 233, 308.
 Anastrophe, 364.
 Anatomy, 80 *et seq.*
 Anatomy of animals, 143, 144.
 Anatomy of birds, 162.
 Anatomy of insects, 169.
 Ancient pottery, 294.
 Anger, 445.
 Angles, 74, 76.
 Animals, 58, 139 *et seq.*, 246, 258, 256, 412, 413.
 Animals, mythical, 177.

Animals, sacred names of, 171 *et seq.*
 Animal tissue, 267, 268, 272, 409.
 Ant, 168.
 Ant People, 347, 348.
 Ant, swallowing of, 116.
 Antelope, 140, 175, 213, 286, 295.
 Anthill, 317, 320.
 Anthropomorphic deities, 157, 246.
 Antics, 502.
 Antidote, 116.
 Antlers, 475.
 Anvil, 273.
 Apache, 28, 290, 291, 294, 274.
 Apaches of Navajo, 23, 24.
Aphyllon fasciculatum, 195.
Aplopappus, 112, 113.
Aplopappus lanuginosus, 185.
 Apoplexy, 108.
 Apparel, 341.
 Appetite, 89.
 Apple, 198.
 Apprenticeship, 43, 281.
 Apricot, 198.
 April, 59.
Aptera (sool.), 167.
Arabis, 187.
Arabis communis, 187.
Arabis Holboellii, 187.
 Arable spots, 264.
 Arbitration, 440.
 Archery, 319, 321, 498.
Arenaria aculeata, 184.
 Arguing, 440.
Aristida oligantha, 190.
 Arm's length (measure), 73, 266.
 Armpit, 84, 116.
 Aromatic sumac (*see* sumac), 181.
 Arrow, 261, 218, 352, 432, 433, 437, 465.
 Arrow for dispatching the coyote, 418.
 Arrow plane, 318.
 Arrow-point, 62, 182, 186, 319, 320, 363, 368, 390, 406, 408, 414, 424, 456.
 Arrow-point charm, 411.
 Arrow shaft, 157, 159.
 Arrow shooting (game), 319, 498.
 Arrow snake, 176, 178.
 Arrow straightener, 318.
Artemisia franserioides, 186.
 Articulation, 91.
 Art and industry, 221 *et seq.*
Asclepias Hallii, 182.
Asclepias verticillata, 182.
Asclepiodora decumbens, 115, 182.
 Ashes, 67, 206, 232, 275, 293, 304, 367, 372, 404, 412, 413, 454.
 Asiatic origin of the Navaho, 26, 28.
 Aspen, 31, 194.
 Assassin, 440, 443.
 Aster, 112, 115, 185, 405.
Aster canescens, 187.
Astragalus, 192, 193.
 Astrologer, 42, 274, 290.
 Astronomy, 42.
 Athapascan, 27, 30, 76, 221.
 Atmosphere, 53.
Atropis, 185.
 At the base of mountain people, 429.
 At the crossing of water people, 429.
 August, 59.
 Authority of headmen, 423.
 Autumn, 29, 72.
 Owl, 241, 275, 283, 297, 306, 397.
 Owl chant, 263.
 Az, 290, 273, 351.
 Aztec, 142.
 Azure Man and Woman, 354.

- BABY SWING, 478.
 Bachelor, 118.
 Badger, 142, 175, 214, 286, 340, 351, 383, 413.
 Badger rattle, 401, 413.
 Badger sinew, 308.
 Badger skin, 305, 461.
 Bait, 322, 508.
 Baking, 305.
 Ball, 485, 487.
 Ball game, 484.
 Ball race, 484.
 Bancroft, H. H., 27.
 Bandelier, A. F., 24, 25.
 Banter, 499.
 Barbed arrow, 319.
 Barberry, 114, 182.
 Bargain, 490.
 Bark, 48, 229, 232, 267, 334.
 Bark cover, 332.
 Bark tray, 69.
 Barter, 338, 457, 489.
 Baseball, 484.
 Basket, 171, 262, 286 *et seq.*, 390, 391, 397, 417, 418, 447, 479, 480, 481.
 Basket design, 294.
 Basket drum, 402.
 Basket, Paiute, 222.
 Basketry, 286 *et seq.*
 Bat, 161, 174, 403, 413.
 Bat hair, 418.
 Bat Man and Woman, 174.
 Bath, ceremonial, 400, 405, 417.
 Bathing, 51, 340, 342, 371, 432, 446, 448, 453, 454, 455.
 Bathing hands in hot pitch, 419.
 Batten comb, 241, 242.
 Batten-stick, 222, 240, 243.
 Bayeta, 232, 244, 461, 462.
 Bead chant, 157, 364, 398, 399, 402, 511.
 Bead chant equipment, 403.
 Bead chant liniment, 405.
 Bead chant of the rock promontory, 364.
 Bead drill, 301.
 Bead people, 429.
 Bead, silver, 274 *et seq.*
 Bead, stone, 300, 309, 372, 453, 480, 497.
 Beadwork, 300.
 Beak, crow's, 413.
 Bean, 198, 211, 261, 404.
 Bean shooter, 505.
 Bean stew, 209.
 Bear, 139, 174, 286, 349, 351, 356, 383, 424, 444.
 Bear clan, 427, 428.
 Bear claw, 403.
 Bear constellation, 43.
 Bear, creation of, 380.
 Bear hunt, 476.
 Bear's tree, 469.
 Bear, venison of, 214, 475, 504.
 Beard, 83.
 Beard tongue, 199.
 Bearers of sun and moon, 41, 353.
 Beauty chant, 364, 383, 401.
 Beaver, 156, 177, 214.
 Beaver fur, 413.
 Beaver headband, 462.
 Bed, 467.
 Redbug, 168.
 Bedding, 341, 467.
 Bee, 166.
 Beef, 204, 211 *et seq.*
 Beer, 217.
 Beetle, 161, 174.
 Bee-weed, 184, 209, 389.
 Bee-weed stew, 209.
 Beggar, 492.
 Begging, 492.
 Belching, 509.
Bellis integrifolia, 187.
 Bellows, 272.
 Belt, silver, 280, 312, 438, 465, 490.
 Belt of Orion, 44.
 Benavides, Fray Alonzo, 23, 24, 25, 26.
 Bent tips (food), 305.
Berberis repens, 183.
 Berry, 211.
 Betting, 154.
 Beverage, 198, 217.
 Bible, 28.
Bidens, 186.
Bidens bipinnata, 187.
 Big dark star, 358.
 Big Dipper, 44.
Biogelia, 230, 298, 304.
Biogelia albicaulis, 186, 395.
Biogelia graveolens, 186.
Biogelia vaseyi, 186.
 Big Fly, 349.
 Big God chant, 364, 385, 401.
 Big God chant, expenditures of, 382.
 Big God chant liniment, 405.
 Bighorn, 140, 175, 318, 352, 394, 395, 413, 414.
 Bighorn constellation, 44.
 Big medicine people, 423.
 Big shirt, 458.
 Big star chant, 363, 401, 402.
 Big water people, 427, 429.
 Big Wolf, 349, 350.
 Bird, 157 *et seq.*, 226, 349, 412.
 Bird egg, 163.
 Bird snare, 164, 323.
 Birth, 450, 467.
 Birth customs, 446 *et seq.*, 450.
 Birth medicine, 116.
 Bit, bridle, 150, 269.
 Bite, remedy for, 116, 142.
 Bitter water people, 427, 428.
 Black Ant, 349.
 Blackbird, 162.
 Black dress shirt, 458.
 Black dye, 230, 298, 303.
 Blackening, 119, 359, 362, 366, 371, 374, 375.
 Black house people, 430.
 Black Mountains, 31, 175.
 Blacksmith, 258, 271.
 Black streaked wood people, 430.
 Bladder pod, 115, 116, 198.
 Blanket, 66, 67, 73, 149, 239 *et seq.*, 245, 246, 398, 418, 453, 465, 468, 470, 480, 481, 486, 489, 510.
 Blanket designs, old style, 250 *et seq.*
 Blanket pole, 235, 236.
 Blessing rite, 41, 222, 329, 346, 355, 363, 398, 402, 404, 406, 411, 446, 450, 501, 507, 509.
 Blizzard, 47 *et seq.*
 Block farm, 263.
 Blood, 366.
 Blood (food), 212.
 Blood passing, 109.
 Blood poisoning, 109, 113.
 Blood poisoning medicine, 113.
 Blood sausage, 212.
 Blood spitting, 110, 114, 350.
 Blowing, 385, 412, 414.
 Blowpipe, 274.
 Bluebird, 159, 162, 213, 387, 394.
 Blue blanket, 248.
 Blue border shawl, 246.
 Blue clay, 288, 388.
 Blue cloud, 45.
 Blue dye, 232, 298.
 Blue-eye grass, 112, 193.
 Blue heron, 100, 173, 404.
 Blue ice, 48.
 Bluejay, 162.
 Blue light, 40, 56.
 Blue mirage, 41.
 Blue mist, 46.
 Blue shirt, 248, 458.
 Blue thunder, 61.
 Blue wind, 46.
 Blue world, 35, 73, 347, 349, 354.

- Blushing, 440.
 Board, 226, 243, 260, 400.
 Boat, 49, 350.
 Boat riding, 52.
 Body mark, 505.
 Body of constellations, 13.
 Body, parts of, 81 *et seq.*
 Body painting, 377, 401, 410, 416.
 Boil cure, 113, 115.
 Boiling, 205 *et seq.*
 Boiling meat, 211.
 Bone awl, 305, 314.
 Bone hoe, 266.
 Bones of *yellow*, 29, 68.
 Boomerang, 321.
 Boot, 310.
 Booty, division of, 475.
 Borax, 274, 279.
 Border, 246.
 Border farm, 264, 350.
 Border of the earth, 26.
 Border strand on loom, 236.
 Borrowing, 382, 482 *et seq.*
 Botanical orders, 181 *et seq.*
 Bottle, 298.
 Bottle, Hopi, 298.
 Bottom of basket, 298.
 Bottom of pot, 298.
 Boulder, 358.
 Bouncing stick game, 350.
Bouteloua hirsuta, 191.
 Bow, 290, 318, 391, 432, 433, 437, 465.
 Bow-drill, 301.
 Bowstring, 318.
 Bow symbol, 306, 367, 375.
 Bowl, 267, 371.
 Box elder, 31, 272.
 Box stirrup, 148.
 Boxthorn, 300.
 Boys' names, 120.
 Bracelet, 64, 281, 283.
 Braiding, 308, 313, 372, 417, 457.
 Brains, 213.
 Branding, 258, 260.
 Brass, 274, 276, 293.
 Brass button, 64, 458, 459.
 Brassware, 267.
Brassica, 188.
 Bread, 67, 216.
 Bread in husks, 207.
 Bread rolls, 206, 207, 209.
 Breadstuffs, 206, 209.
 Breaking horses, 145.
 Breechclout, 66, 160.
 Breeches, 464.
 Breeze, 53, 365.
 Brick, 65.
 Bride, 447.
 Bridegroom, 447.
 Bridge, 267.
 Bridle, 150, 280.
 Bridle, silver, 281, 312.
 Brimstone, 65, 68, 328.
 Brinton, Dr., 24.
 Broad-leaved medicine, 115.
 Broad-leaved yucca, 417.
 Broken braids (food), 298.
 Broken pottery, 288, 352, 365.
 Broken tools, 454.
 Bronchial trouble, 114.
 Broom, 190, 270, 341.
 Brothel, 98.
 Brother-in-law, 449.
 Brown (color), 60, 234.
 Brush, 68, 280, 304, 412.
 Buckboard, 151.
 Buckle, 281.
 Buckle, silver, 312.
 Buckskin, 62, 148, 230, 252, 250, 256, 275, 280, 298, 306, 308, 314, 317, 367, 390, 408, 400, 418, 419, 447, 467, 470, 493, 499.
 Buckskin belt, 459.
 Buckskin breechcloth, 400.
 Buckskin breeches, 459.
 Buckskin cap, 461, 462.
 Buckskin headband, 463.
 Buckskin leggings, 460.
 Buckskin pants, 459.
 Buckskin shirt, 457.
 Buffalo, 398.
 Buffalo rattle, 401, 402, 413.
 Buffalo robe, 303, 153, 467, 480.
 Bugaboo, 290, 495.
 Bug, sacred, 160.
 Buggy, 153.
 Building material, 63.
 Bull-bat, 161, 174.
 Bull-roarer, 406, 410, 412, 411.
 Bullsnake, 176, 178, 251, 376, 425.
 Bullsnake constellation of, 41.
 Bullsnake rite, 171.
 Bur-grass, 191.
 Burial, 451, 472, 588.
 Burlap, 270.
 Bur-marigold, 196.
 Burnt hog in, 310, 455.
 Burro, 211, 497.
 Burro creation of, 336.
 Butt and tip, 257, 283, 408, 411, 414, 415, 417, 418.
 Buttercup, 197.
 Butterfly, 167.
 Buttes, 216.
 Button, 313.
 Button bridle, 281.
 Button silver, 279, 280, 290, 308, 311, 313, 450.
 Buttonhole, 280, 310.
 Buying and selling, 60.
 Buzzard, 150, 172.
 CACTUS, 183.
 Cactus People, 340.
 Cactus pickers, 211.
 Calendar, 58.
 Calico, 197, 418, 419.
 Call, 377, 383, 385, 388, 420, 460.
Calochortus, 193.
 Camass, death, 193.
 Camel, 142.
Campyulid uniflora, 184.
 Canaigre, 231.
 Cancer, 108.
 Cancer root, 113, 193.
 Candle, 40, 406.
 Candler, 503.
 Candy, 217.
 Cane, 301.
 Cane cactus, 183, 359.
 Cane-reed, 190, 251, 383, 386.
 Cane-reed whistle, 413.
Cania major, 44.
 Canned goods, 214, 216.
 Cannelcoal, 56, 222, 328, 390, 402, 410, 476.
 Cannelcoal Mountain, 137.
 Cannibal, 495.
 Canoeing, 49.
 Canopus, 44.
 Canopy bow, 470.
 Cantaloupe, 183.
 Cantinas, 149.
 Canyon, 31, 64.
 Canyon de Chelly, 108.
 Cap, 100 *et seq.*
 Cap with opposite peaks, 462, 463.
 Captive, 250, 425, 427, 431, 438.
 Caraway seed, 210.
 Carcass, 506.
 Carded blanket, 217.
 Cardinal points, 35, 40, 66, 130, 283, 286, 320, 331, 332, 335, 377, 390, 401, 406, 410, 415, 422.
 Card playing, 478, 479.

- Cardinal flower, 194.
 Carding wool, 225, 226.
 Care of sick, 112.
Carpinus Americana, 188.
 Carrizo Mountains, 31.
 Carrying basket, 168, 208 *et seq.*, 432, 510.
 Carrying cord, 471.
 Carrying frame, 510.
 Cartridge belt, 312.
Carum, 200.
 Carving, 495.
Castilleja, 190.
Castilleja minor, 395.
 Cassillo (*Sp.*), 271.
 Cassiopoea, 44.
 Castration, 148, 154.
 Cat, 140, 178.
 Cat People, 348, 349.
 Cat's cradle, 488, 489, 507.
 Catarrh, 108.
 Catarrh medicine, 112.
 Catchfly, 184, 395.
 Caterpillar, 174.
 Cat-tail flag, 115, 200.
 Cattle, 439.
 Cattle, creation of, 356.
 Cattle raising, 257, 258.
 Cause of disease, 346, 379.
Ceanothus, 197.
 Cedar, 31, 66, 190, 243, 257, 318, 409, 467, 497.
 Cedar ashes, 205, 206, 207, 208, 293.
 Celibacy, 450.
Celtis, 200.
Cenchrus tribuloides, 191.
 Census, 33, 34.
 Center of earth and sky, 35, 36.
 Centipede, 168, 174.
Cerastium arvense, 184.
Cercocarpus parvifolius, 198, 232.
 Ceremonial basket (*see* basket), 297.
 Ceremonial bath, 295, 343.
 Ceremonial farm, 263.
 Ceremonial feasting, 389.
 Ceremonial hogan, 328, 333, 389.
 Ceremonial paraphernalia, 381, 382, 383.
 Ceremonial sudatory, 342.
 Ceremony, 66, 79, 105, 106, 155, 180, 235, 289, 292, 328, 350, 386, 424, 450, 487, 500.
 Ceremony, close of, 38.
 Ceremony for hogan, 229.
 Ceremony postponed, 41.
 Ceremony suspended, 295.
 Ceremony, time for, 366.
Cereus, species of, 183, 184.
 Change in ceremony, 378, 397.
 Change of domicile, 329, 437.
 Change of name, 119.
 Changing Woman, 355, 427.
 Chant, 58, 69, 105, 114, 178, 347, 361, 362, 507.
 Chant legends, 347, 361, 425.
 Chant liniment, 405 *et seq.*
 Chant lodge, 362.
 Chant with and without *vel.* 385.
 Chant with masked personator, 405.
 Chanter (*see* singer, shaman), 381, 509.
 Chapparal jay, 162.
 Chapped hand, 108.
 Character, 87.
 Charcoal, 68, 69, 274, 398, 461.
 Charcoal, lightning struck, 404.
 Charm, 372, 408, 410, 412.
 Charity, 509.
 Chase, 23, 349, 363, 474 *et seq.*
 Chasing, 275, 281.
 Chastisement, 105, 420, 438, 450, 496.
 Cheek strap, 281.
 Cheese, 216.
Cheilanthes lanuginosa, 189.
Chenopodium, 185.
 Cherry wood, 396.
 Chewing juniper, 497.
 Chewing tobacco, 506.
 Chicanery, 108.
 Chickadee, 160.
 Chicken, 162, 484, 496.
 Chicken-pox, 108.
 Chicken pull, 481.
 Chief, 247, 422, 453.
 Chief, distinguishing mark of, 41, 422, 494.
 Chief, names of, 125.
 Chief's blanket, 247.
 Childbirth, 453.
 Chilli, 190.
 Chipewyans, 29.
 Chipmunk, 178.
 Chips (money), 491.
 Chiricahua-Apache, 217.
 Chiricahua-Apache clan, 481.
 Chiricahua-Apache wind chant, 364.
 Chiricahua-Apache wind chant liniment, 405.
 Choke cherry, 197, 211, 416.
 Chronic disease, 108.
 Chuska Range, 31.
 Cider, 217.
 Cigarette, 66, 159, 418, 506.
 Cinch, 149, 249.
 Cinch bug, 169.
 Cinch loom, 249.
 Circle farm, 263, 350.
 Circle of branches, 335.
 Circle of time, 38.
 Cistern, 49.
Citrus aurantium and *limonium*, 182.
 Clan, 356, 422, 424 *et seq.*, 439, 449, 453, 460.
 Clan affiliation, 434.
 Clan right, 437, 438, 433.
 Clansman, 449, 450, 453, 490.
 Clasp-knife, 269.
 Claw, 414, 417.
 Claw dance, 364.
 Clay, 65, 273, 274, 288, 289.
 Clay spoon, 286.
 Clay tubes, 272.
 Cleanliness, 170, 340.
 Cleat, 281.
Clematis ligustica folia, 197.
Cleome pungens, 184.
 Cliff dweller, 30, 374, 400.
 Cliff dwellers' water, 401.
 Cliff dwelling, 496.
 Cliff monsters, 358.
 Cliff-rose, 197.
 Cliff-rose bark, 470, 485.
 Climate, 437.
 Climatic change, 43.
 Clock, 39, 270.
 Close of ceremony, 38, 375, 376, 378, 402, 420, 421.
 Closed rim on basket, 295, 447, 448.

- Close to water people, 428.
 Clothes, 341, 457, 463.
 Clothing a corpse, 458.
 Cloud, 45, 353.
 Cloud effect, 45, 75, 353, 386, 399.
 Clown, 379, 388, 465.
 Club-knife, 411.
Cnicus Neo-Mexicanus, 185.
 Coal, 33, 63, 65, 66, 68.
 Coal, surface, 398.
 Coat, 380.
 Cocklebur, 116, 185.
 Coconino, 391.
 Code of signals, 437.
 Coffee, 304.
 Coffee-mill, 63, 219.
 Coffee plant, 198.
 Cohabitation, 509.
 Coiled basket, 294.
 Coin, 64, 278, 278, 280, 490, 491.
 Cold, a, 108, 341.
Coleoptera, 164.
 Colic, 109.
 Collar, 390, 413, 458.
 Collar-bone of enemy, 375.
Colombo, 116.
 Color, 69 *et seq.*, 70, 71, 137, 157, 164, 171, 238, 246, 286, 289, 388, 390, 391, 398, 398, 404, 406, 410, 480, 481, 486.
 Columns of light, 56.
 Comanche, 308, 308, 374, 438.
Comandra pallida, 198.
 Comb, 75, 222, 341, 342, 432, 446.
 Comet, 45.
 Compass (*see* cardinal points).
 Compensation of singer, 380, 381.
 Completing a circle, 454.
Compositae, 115, 185, 186.
 Conch, 301.
 Concha, 281, 312.
 Concubinage, 426.
 Confidence, 508.
 Confinement, 107, 111.
 Confinement medicine, 115.
 Conical hogan, 388, 390.
 Conifer, 308.
 Conjugal fidelity, 365, 440.
 Consanguinity, 435, 436, 431, 432, 434 *et seq.*
 Conservatism, 351.
 Constellation, 38, 42, 353, 402, 469.
 Constipation, 109.
 Construction of mask, 386.
 Contagiousness of disease, 107.
 Contempt, 128, 439, 440.
 Contents of medicine pouch, 106, 342.
 Contrivance, modern, 368, 369.
 Conversation, 500.
 Cooking, 350.
 Cooking pot, 285, 287, 290.
 Cooking utensils, 218, 508.
 Coon can, 475.
 Cooper's hawk, 158.
 Copper, 64, 274, 278, 279, 281, 283.
 Copperhead, 176, 306, 415, 425.
 Copulation mixture, 413.
 Coral bead, 301.
 Cord, 235, 236, 286, 306, 390.
Cordylanthus ramosus, 113, 199.
 Corn, 190, 304, 305, 314 *et seq.*, 360, 365, 367, 437, 490.
 Cornbeetle, 388.
 Corncake, 391, 392, 446.
 Corncob, 288.
 Corn husking, 106.
 Cornmeal, 305 *et seq.*
 Cornmeal gruel, 432.
 Cornmeal, sprinkling of, 323, 418.
 Corn people, 428.
 Corn pith, 395.
 Corn pollen (*see* pollen), 383.
 Corn whiskey, 217, 218.
 Corns, 116.
 Corpse, 458, 508.
 Corral, 56, 257, 302, 335, 475.
 Corral dance, 335, 376, 396, 420.
 Corral medicine, 116.
 Corral rite, 363, 395, 474.
 Corvus, 43.
Corydalis aurea, 114, 189.
 Cosmogony, 35.
 Costume, 457 to 466.
 Cotton, 222, 274.
 Cottonball, 213.
 Cottonwood, 31, 32, 65, 66, 148, 196, 272, 415, 469, 496.
 Cough, 341, 497.
 Council, 422.
 Counters, 77, 481, 486.
 Counting, 77, 479, 480, 481, 482, 486.
 Courier, 387, 510.
 Cow, 288.
Cowanla Mexicana, 197.
 Cow dung, 288.
 Cowlick, 80.
 Coyote, 42, 44, 58, 140, 175, 178, 213, 251, 348, 353, 360, 425, 444.
 Coyote chant, 368, 385, 399, 395.
 Coyote chant equipment, 404.
 Coyote, killing of, 508.
 Coyote medicine, 409.
 Coyote of the west, 351.
 Coyote smoke, 395.
 Coyote's feather (constellation), 44.
 Coyote's star, 44, 353.
 Cradle, 467 *et seq.*
 Cradle-band loom, 249.
 Cradle, mode of carrying, 472.
 Cramp, 111.
 Crane, 160, 173.
 Crane bill, 407, 408.
 Crazy, 98.
 Creation, 353.
 Creation of clans, 425, 427.
 Creation of man, 356.
 Creation of stars, 42.
 Creator, 58.
 Creator of all things, 346.
 Credulity, 106.
 Crescent, 41.
 Cress, 115.
 Cribwork, 332.
 Cricket, 166.
 Crime, 439, 440.
 Crimson, 72.
 Cross, 279.
 Cross of pollen, 418, 448.
 Crossbeam, 235, 236, 238, 243.
 Crosspole, 222.
 Cross stitch, 307.
Croton Texensis, 189.

- Crow, 159, 172, 213, 318.
 Crow bill, 372.
 Crow feathers, 159, 412, 461, 462.
 Crow's fat, 113.
 Crucible, 273, 287.
Crucifer, 115.
 Crumble, 394, 395.
 Crupper, 148.
 Crushed pottery, 288.
 Crushed tallow, 213.
Cucumis citrillus, 189.
Cucumis melo, 188.
Cucurbita, 188.
 Cudweed, 115, 185.
 Cunning, 437.
 Oup, 219, 233.
 Currant, 198, 199, 211, 226, 243.
 Cursing, 444.
 Curtain, 328, 332, 418, 486.
Cuscuta umbellata, 187.
 Custom, 41, 119, 120, 121, 220, 222, 328, 360, 374, 385, 421, 424, 425, 432, 433, 446, 447, 449, 458, 460, 489 *et seq.*
Cymopterus, 200.
 DAM, 49 *et seq.*, 264.
 Damage to property, 439.
 Dancer, 309, 376, 384, 420.
 Dancing, 309, 371, 378, 392.
 Dancing porcupine quill, 377, 419.
 Dancing shoe, 308.
 Dandruff, 107, 112.
 Dark, 39, 69 *et alibi*.
 Dark cloud, 45.
 Dark fish, 177.
 Dark ice, 48.
 Dark light, 40, 56.
 Dark mirage, 41.
 Dark mist, 46.
 Dark moss, 178, 177.
 Dark thunder, 61.
 Dark wind, 46.
 Dark world, 35, 73, 347.
 Darkness, 55, 251, 328, 349.
 Darkness Man, 355, 383.
 Darkness Woman, 383.
Datura stramonium, 199.
 Dawn, 36, 38, 39, 55, 328, 349, 354, 377.
 Dawn feather, 44.
 Dawn Man, 354, 355, 383.
 Dawn Woman, 354, 383.
 Day and night, institution of, 483.
 Daylight, 38, 39.
 Day of the week, 59 *et seq.*
 Day, principal parts of, 37, 39.
 Days of mourning, 454.
 Deafness, 107, 112.
 Death, 108, 109.
 Death line, 454, 455.
 Death of a warrior, 438.
 Death of the sun and moon, 41.
 December, 59.
 Decimal system, 76.
 Decoration, 288.
 Decoration of arrow, 318.
 Decoration of cap, 461.
 Decoration of cradle, 470.
 Decoration of grave, 454.
 Decoration of hogan, 328.
 Decoration of mask, 388, 390 *et seq.*, 413.
 Decoration of moccasins, 308, 319.
 Decoration of pottery, 286, 287, 299.
 Decoration of prayerstick, 306.
 Decoration of rattle, 402.
 Decoration of shield, 317.
 Decoration of spear, 438.
 Decorum, 120, 447.
 Decoying, 476.
 Dedication of hogan, 328, 390.
 Dedication of mask, 363, 396.
 Deer, 139, 140, 175, 213, 268, 286, 313, 315, 316.
 Deer constellation, 44.
 Deer Family, 349.
 Deer grower, 172.
 Deer hunt, 475.
 Deer water people, 428.
Delphinium scapoum, 197.
 Deliverance, 116, 450, 508.
 Demand for singer, 108.
 Democracy, 422.
 Dene nations, 27, 28.
 Deposit, 331, 372, 415, 416, 417, 418, 495.
 Deposit in grave, 453.
 Deposit of prayerstick, 394, 397.
 Deposition of chiefs, 422.
 Derangement, mental, 110.
 Deserted hogan, 340.
 Design, 74, 76, 237, 250, 255, 284, 282.
 Design of basket, 294.
 Design in silver, 277, 284, 285.
 Destruction of hogan, 339.
 Dew, 46.
 Diagonal weave, 243.
 Diamond shape, 75, 251.
 Diamond weave, 243.
 Diarrhoea, 109.
 Dice, 311, 350, 479.
 Dice game of *ashbii*, 480.
 Dice game of *tsii*, etc., 481.
 Die, iron, 278, 290.
 Diet, 437.
 Dimension of hogan, 331.
 Dimension of sudatory, 341.
Dine nahodloni, 29.
 Diphtheria, 107 *et seq.*, 113.
 Dipper, 286.
 Dipping, 51 *et seq.*
 Dipping sheep, 238, 259.
Diptera, 168.
 Direction, 55 *et seq.*, 137, 341, 396, 396, 399, 400, 416, 417, 447, 454, 482, 483.
 Directional assignment, 55 *et seq.*, 295.
 Direction from and with the sun (*see* sunwise), 37.
 Dirt from the field, 410.
 Discipline, 402.
 Disclosing one's name, 120.
 Disease, 105, 318, 349, 350, 379, 418.
 Disease, modern, 107.
 Disease of horse, 153.
 Disgrace, 420.
 Dishes, 219.
 Disk, 273.
 Disk, silver, 280.
 Dispatching arrow, mode of, 319.
 Disposition, 88.
 Disposition of medicine pouch, 381.
 Dispute, 440.
 Disrespect, 421.
 Disrobing, 453.

Distaff, 222, 226, 243.
 Distance, 73, 74.
 Ditch, 264.
 Diuretic trouble, 109, 113.
 Divination, 365, 410.
 Divinator, 374, 380.
 Divinities, character of, 346, 418.
 Divinities, influence of, 105.
 Division of lower worlds, 35.
 Division of property, 456.
 Divorce, 433, 449.
 Dizziness, 109.
 Dock, 231, 233.
 Dodder, 187, 210.
 Dodgeweed, 117, 186, 369, 416.
 Dodging, 437.
 Dog, 142 *et seq.*, 175, 213, 251, 411, 496.
 Doll, 496.
 Dolphin, 44.
 Doorway, 56, 322, 339, 399.
 Dotted figure, 252.
 Double clan names, 427, 432.
 Double diamond figure, 252.
 Double divine gift, 450.
 Double row of white teeth (mask), 385.
 Double square (figure), 252.
 Double weave, 244.
 Doubtful clan, 422.
 Dough, 265, 307.
 Downy feather cord, 412, 416.
 Downy weave, 244, 245.
Draba montana, 187.
 Dragon fly, 167.
 Dragon's head (*bat.*), 191.
 Drainage, 31.
 Drawing, 74, 270.
 Dream, 346, 350, 379, 501.
 Dress, 391, 399, 407, 408, 465.
 Dress of herbs, 412, 417.
 Dressing of crane bills (ceremony), 408.
 Drink, 51, 217, 218, 437.
 Drinking supply, 40.
 Drinking vessel, 219.
 Drizzling rain, 78, 394.
 Dropsy, 108.
 Drouth, 25, 32, 54.
 Drowning, 52.
 Drowsiness, 350.
 Drum, 63, 249, 293, 276, 377, 401, 402.
 Drum, modern, 270.
 Drumstick, 290, 293, 297, 402.
 Drunkenness, 217, 439.
 Duck, 160, 173, 213, 296, 496, 507.
 Duckweed, 198.
 Dummy, 484.
 Dummy pole, of hogan, 331.
 Dumpling, 248, 249.
 Dung, 244.
 Dust, 51.
 Dust, silver, 271.
 Duty of clan, 432, 433.
 Dwelling, primitive, 327.
 Dye, 228, 227, 248 *et seq.*
 Dyeing, 222 *et seq.*, 223, 234, 235, 243 *et seq.*
 EAGLE, 157 *et seq.*, 172, 318, 412, 511.
 Eagle chant (*see* bead chant), 157.
 Eagle feather, 316, 317, 372, 399, 399, 401, 401, 402.
 Eagle feather collar, 413

Eagle food, 213.
 Eagle monster, 251.
 Eagle trapping, 157, 213, 476, 508.
 Eagle trapping rite, 364.
 Eagle whistle, 511.
 Ear (of constellation), 43.
 Earache, 107.
 Earache medicine, 112.
 Ear cord, 391.
 Earmarking, 258.
 Earring, 284, 301, 439, 464, 465.
 Earth, 58, 332, 333.
 Earth cord, 222.
 Earth, mother of all living, 35, 354.
 Earth, sex of, 35.
 Earth, shape of, 35, 33.
 Earthquake, 36.
 Earth Woman, 354, 359.
 Earthen bowl, 218, 237, 407.
 Earthen pot, 455.
 Earthen spoon, 218, 296.
 Earthenware, 287, 298.
 Eating, 89, 215.
 Eating pollen, 399.
 Eavesdropping, 88.
Echinosperrum Radowskii, 183.
 Echo, 64.
 Eclipse, 41, 208, 508.
 Egg, 162, 507.
 Egret, 160, 173.
 Either side hoe, 206.
 Elbow's length, 73.
 El Cabezón, 20.
 Elephant, 142.
 Eleventh world, 349.
 Elk, 139, 140, 266, 303, 396.
 Embers, 66, 205, 212, 213, 274.
 Emblazoning, 425.
 Embrace, 505.
 Emergence, 36, 175, 176, 349, 351, 352, 353, 362.
 Emery paper, 275.
 Emesis, 289, 412.
 Enclosure basket, 294.
 Enclosure figure, 253.
 Enclosure (of branches), 325, 376.
 End strand, 235, 236.
 Endurance, 437.
 Engraving, 275, 291.
 Entrails, 212.
 Entrails (food), 212.
 Entrance to sky, 35.
 Entrance to sudatory, 341.
Eupatorium occidentale, 186.
Ephedra trifurcata, 189, 296.
Epilobium, 195.
 Eponymous ancestry, 425.
 Equipment of chants, 389, 402 *et seq.*, 403, 409.
Equisetum, 189.
Eriogonum flagellaria, 189.
Eriogonum, 115, 196, 395, 409.
Eriogonum alatum, 115, 403.
Eriogonum fasciculatum, 409.
Eriogonum microthecum, 409.
Eriogonum asperum, 187.
 Ermine, 304, 413.
 Error in chants, 508.
 Esculent herbs, 204 *et seq.*, 209, 437.
Estzanadle, 355, 390, 427, 448.
 Esophagus, troubles of, 109, 111.
 Ethnology Bureau of 26

- Eupatorium purpurium*, 186.
Euphorbia, 115, 180.
Eurotia lanata, 185.
 Evaporating, 306, 310, 216.
 Evening primrose, 115.
 Evening star, 38, 39.
 Evening twilight, 55, 328.
 Evening Twilight Man and Woman, 338.
 Everlasting pea, 193.
 Evil, 349.
 Evil shooter, 348.
 Evil spell, 413.
 Exemption from mourning, 455.
 Exhibition, public, 40.
 Exit of basket, 294.
 Exit of hogan, 56.
 Exit, line of, 286.
 Exogamous marriages, 426.
 Exorcising, 362.
 Expectoration, 454, 497, 498.
 Expedition of 1849, 271.
 Expense of chant, 380, 382.
 Exploitation of patient, 106.
 Extinct chants, 364, 368.
 Extracting stones, beans, etc., 505.
 Extra-tribal pottery, 287.
 Eye-crust, 400.
 Eye on bull-roarer, 414.
 Eye on mask, 387.
 Eye, remedy for, 112.
 Eyewater, 159.

FACE COVER CRADLE, 467.
 Face mask, 386, 388, 490.
 Face painting, 70, 372, 453, 487.
 Face print, 383.
 Facet on prayerstick, 397.
 Faculty, words referring to, 86 *et seq.*, 163.
 Fall, 32.
 Fallen foe, 456.
 False mallow, 115, 194.
 False wallflower, 115, 187.
 Family appellation, 119.
 Family increase, 450.
 Farm, 259, 263, 350.
 Farming, 263, 349, 350.
 Fasting, 454.
 Fawn, 292.
 Feather, 157, 158, 387, 389, 390, 391, 394, 396, 407, 408, 412 *et seq.*, 417, 418, 424, 461, 462.
 Feather chant, 173, 363, 392, 401.
 Feather charm, 411.
 Feather cord, 412.
 Feather of Orion, bear, thunder, 43, 44.
 Feather-shaft chant, 364, 402.
 Feathered cap, 462, 463.
 Features, 81.
 February, 59.
 Fee, 370, 380, 381, 418.
 Feeding the mask, 349.
 Feline, 140, 365.
 Female dancer, 420.
 Female God, 383, 384, 388, 390, 392, 499.
 Female singer, 382.
 Female slave, 424.
 Fermentation, 217.
Ferula multifida, 200.
 Fetish, 399.
 Feud, 439 *et seq.*
 Fever, 109.

 Fiber, 203.
 Field, 267.
 Field rat sinew, 308.
 Figure, 237, 250, 255, 282.
 Figures of cat's cradle, 489.
 File, 269, 275, 278, 279, 282.
 Filigree work, 284.
 Filthiness, 171.
Findlera rupicola, 116, 170, 199, 243, 255, 318.
 Fine, 450.
 Finger-mark (food), 308.
 Finger measure, 73.
 Finger-nail, 366.
 Finger-tip measure, 73.
 Fire, 40, 65 *et seq.*, 273, 288, 418.
 Firearms, 317, 465.
 Firebrands, 373.
 Fire ceremony, 66, 415.
 Fire dance, 376, 377, 419, 420.
 Fire dancer, 65, 377.
 Fire-drill, 65 *et seq.*, 391, 415.
 Firegod, 42, 44, 348, 353, 385, 388, 390, 391.
 Firegod cake, 208.
 Fire of constellation, 43.
 Fireplace, 272, 273, 412.
 Firewood, 66.
 Firmament, 36.
 First Angry, 44, 348.
 First-born, 435.
 First Boy, 348.
 First Girl, 348.
 First hogan, 349.
 First Made, 348.
 First Man, 137, 348, 349, 350, 351, 352, 353, 354, 355.
 First Woman, 348.
 Fish, 138, 156, 177, 178, 214, 349, 507.
 Fish monster, 351.
 Five fingers (*bof.*), 197.
 Five night ceremony, 368, 365.
 Fixed star, 45.
 Flagellation, 498, 500.
 Flag iris, 115, 191.
 Flag pollen, 400, 408.
 Flash lightning, 60, 222.
 Flatiron, 369.
 Flatulency, 109.
 Flax, 194.
 Flaying, 302, 308.
 Fleabane, 186.
 Fledged stick spoon, 407.
 Fletching, 318.
 Flint, 66, 316, 319.
 Flint knife, 391.
 Flint rock, 415.
 Flood, 351, 360, 426.
 Flooding prairie dogs, 476.
 Floor, 328, 331.
 Flora, 362.
 Flour, 307.
 Fluffy pole, 483.
 Fluffy weave, 344.
 Flute, 63, 511.
 Fly, 166.
 Flying, 163.
 Flying snake, 178.
 Foam, 401.
 Fog, 46.
 Folded arms people, 429, 430, 432.
 Food, 160, 163, 204 *et seq.*, 305, 215, 369.

Fool, 465.
 Football, 350.
 Foot disease, 111.
 Foot ease, 116.
 Footgear, primitive, 305, 465.
 Foot race, 484.
 Foot-wrap, 460.
 Fording, 49, 58.
 Foreign enemies, 359, 362, 374.
 Foreign tribe, 377, 419, 424.
Forestiera Neo-Mexicana, 198.
 Forge, 272.
 Fork, 219.
 Formation of clans, 425, 427.
 Fort Defiance agency, 31.
 Fort Sumner, 33, 59, 126, 257, 394.
 Four-o'clock, 196, 395.
 Fox, 349.
 Fox-tail grass, 190, 372.
 Framework of hogan, 331.
Fraseria, 115, 189.
 Freezing, 48.
 Freightling, 151, 510.
 Friday, 60.
 Fried meat, 212.
 Friendship, 425, 433.
 Frijoles, 193.
 Fringe, 457, 458.
 Fringed Mouth, 295, 345, 348, 391, 392, 420.
 Fringed rain, 390.
 Frog, 156, 251.
 Front on bull-roarer, 414.
 Frost, 46.
 Fruit, 211.
 Fuel, 66 *et seq.*, 274.
 Funeral, 454.
 Fur, 156, 390.
 Fur collar, 390, 458.
 Furniture, 328.

GAILLARDIA PINNATIFOLIA, 112.
 Gambling, 311, 475, 478, 486, 507.
 Game legend, 478.
 Game trap, 322, 475.
 Game, wild, 473.
 Games, 91, 350, 478.
 Gamot, 200, 210.
 Gaping, 111, 500.
 Garden daisy, 187.
 Gargle, 90.
 Garment, 391.
 Garnet, 64, 284.
 Garter, 465.
 Garter loom, 249.
 Garter string, 249.
 Gastritis, 109.
Gaura parviflora, 115, 195.
 Generation, 350.
 Gens, 356, 424 *et seq.*
 Gentian, 112, 115.
 Gentile system, 424 *et seq.*
 Geographical names, 130 *et seq.*
 Geranium, 115.
 Germantown blanket, 244, 248.
 Germantown yarn, 232, 244, 245.
 Gesture, 87.
 Giant, 28, 29.
 Giddiness, 109.
 Gift, 391, 419, 446, 447.
 Gila Apache, 23.

Gila monster, 156, 177, 365.
Gilia, 199.
Gilia attenuata, 114.
Gilia longiflora, 305.
 Girls' dance, 366, 369, 372.
 Girls' names, 121.
 Girth, 149.
 Glandular swelling, 199.
 Glass, 64, 284, 505.
 Globe, the, 33.
 Glove, 255, 256.
 Glucose, 213.
Glycyrrhiza lepidota, 192.
Gnaphalium Sprengelii, 185.
 Gnat, 166.
 Goat, 143.
 Goat milk, 304.
 Goat raising, 257, 258.
 Goatskin, 299, 308, 321, 325, 370, 468, 470, 471.
 Goatskin basket, 299 *et seq.*
 Goatskin rope, 314.
 Gods, 30, 362, 383, 384.
 Goddard, Pliny Earl, 76.
 Goltre, 108.
 Gold, 65.
 Golden rod, 186, 230, 304.
 Goose, wild, 173.
 Goose-grass, 115, 197.
 Gopher, 175, 383, 411.
 Gopher's dirt, 372.
 Gossip, 88, 441.
 Gourd, 218, 447.
 Gourd Children, 351, 353.
 Gourd dipper, 288.
 Gourd ladle, 286, 447, 448.
 Gourd rattle, 401 *et seq.*
 Gourd, wild, 204.
 Gout tonic, 113.
 Government, 34, 126, 143, 151, 225, 257, 276.
 Government, tribal, 422, 423, 434.
 Grace, saying, 220.
 Grain, 262.
 Grama-grass, 191, 209, 416.
 Granary, 267.
 Grandmother counters, 487.
 Grapevine, 201.
 Grape, wild, 211.
 Grass, 32, 190, 353.
 Grass fabrics, 457.
 Grasshopper, 165, 174.
 Grass mat, 327.
 Grass shoe, 308, 309, 311.
 Grass tassel, 391.
 Grave, 453 *et seq.*
 Gravel, 63.
 Gravy, 210.
 Gray cottonwoods people, 430.
 Gray eagle feather, 407, 408.
 Gray God, 384, 398.
 Gray greasewood, 185.
 Gray water, 217.
 Grayish giant, 358.
 Grazing, 257.
 Grease, 372.
 Greasewood (black), 32, 116, 117, 185, 218, 243, 255, 265, 318, 323, 409, 479.
 Greed, 509.
 Green, 72.
 Green corn, 204 *et seq.*
 Green dye, 233.

- Green frog, 177.
 Green lizard, 177.
 Greens, 309.
 Greeting the sun, 372.
 Gregg, 223.
 Griddle, 63.
 Griddle cake, 206, 207, 300, 219.
 Griddle stone, 207, 219.
 Grinding, 63, 204, 206, 350, 511.
 Grindstone, 64, 209.
 Gristmill, 63.
 Groaning stick, 414.
 Gromwell, 183, 408.
 Groove seam shoe, 307.
 Ground cherry, 199.
 Groundsel, 187, 395.
 Growing, 91.
 Growing corn, 419.
 Growing part (*see* butt), 387.
 Growing stone, 64, 408.
 Growing yucca, 377, 419.
 Grub, 169, 174.
 Grub Man and Woman, 348.
 Gruel, 205, 389, 432.
 Gum, 230, 288.
 Gun, parts of, 325, 336.
 Gunnysack, 270, 308.
Gutierrezia euthamiae, 186.
Gymnolomia, 187.
 Gypsum, 69, 399.

HACKAMORE, 150.
 Hackberry, 200, 272.
 Hall, 48.
 Hall chant, 363.
 Hall water, 401.
 Hair bath, 80, 345.
 Hairbrush, 112, 190, 464.
 Hair-cord, 80, 367, 369, 464.
 Hair-cord loom, 249.
 Hair, dressing of, 345, 453, 464.
 Hallotis Mountain, 137.
 Halo, 37.
 Hammer, 269, 275, 278.
 Handle, 273, 286.
 Handle of rattle, 402.
 Handshaking, 505.
 Hardened buckskin, 462.
 Hard wood, 65, 66, 170, 199, 226, 240, 242, 243, 274, 318.
 Harebell, 184, 400.
 Hare Skins Indians, 29.
 Harness, 151.
 Harrow, 267.
 Harvest, 262.
Hashch-e, 349, 393.
Hashk-an dance, 377.
 Hat, 280, 466.
 Hatred, 441.
 Hauling, 153, 268.
 Hawk, 157, 158, 172, 286, 318.
 Hawk (food), 213, 425.
 Hawking, 90.
 Hay, 262, 268.
 Hayfork, 268.
 Headache, 107, 112.
 Headband, 156, 463.
 Headgear, 295, 460, 464.
 Headman (*see* chief), 382, 422.
 Head mask, 386.

 Head of *velto*, 29.
 Head-raise, 469, 470.
 Headstall, 281, 312.
 Heald, 222, 226, 241, 243, 244, 250.
 Healing tonic, 199.
 Hearing, faculty of, 88.
 Hearing, divination by, 265.
 Heartburn, 109, 115.
 Heat, 37, 41, 68.
 Heated stone, 341.
 Heavens, the, 36, 346.
 Heavens, inhabitants of, 157.
Hedeoma Drummondii, 198.
 Hedge hyssop, 192.
 Hedge mustard, 188, 209.
 Hedgehog grass, 191.
 Heir, 388.
Helenium Hoopesii, 187, 266.
Helianthus, 187.
 Helix, 263.
 Hell, 346.
 Helmet, 459.
 Hematite, 65.
 Hemp rope, 314.
Heuchera bracteata, 199.
 Heptagonal hogan, 333.
 Herald, 119.
 Herd, 257.
 Herding, 257, 422.
 Hermaphrodite, 178, 292, 350.
 He-rain, 47, 448.
 Heredity, 422.
 Herrero (*Sp.*), 271.
 Hewett, Edgar L., 24.
 He who cuts, 360.
 He who is versed in all things, 360.
 He who renews all things, 360.
 He who turned yellow, 360.
 He who was reared in the earth, 360.
 He who was reared under ground, 360.
 Hidden ball game, 485.
 Hide, 302, 393.
 Hide rattle, 401, 410, 413.
 History, 266.
 Hobble, 149, 313.
 Hoe, 266, 267.
 Hogan, 40, 68, 69, 267, 268, 292, 327 *et seq.*, 337 *et seq.*, 349, 353, 380, 392, 416, 418, 455, 508.
 Hog's potato, 193.
 Holster, 280.
 Holy events, 353.
 Holy Girl, 350, 360.
 Holy Ones, 346, 368, 364.
 Holy People, 353, 361, 479.
Honaghani clan, 356, 427.
 Hoof rattle, 401.
 Hoop, 272, 298, 299, 416, 422, 423.
 Hoop and pole (game), 159, 350, 422, 423.
 Hopi, 213, 226, 439, 497.
 Hopi clan, 431, 496.
 Hopi doll, 497.
 Hopi pot, 290.
 Hopi village, 135.
 Hopping, 415, 454.
Hordeum jubatum, 190.
 Horizon, 36.
 Horizontally striped blanket, 246.
 Horn, 325, 390.
 Hornbeam, 188.

Horned monster, 251, 357.
 Horned toad, 176, 251.
 Horse, 145 *et seq.*, 262, 439, 446, 500, 510.
 Horse, creation of, 356.
 Horse diseases, 154.
 Horseflesh, 211, 214.
 Horsedfy, 166.
 Horsehair, 47, 81, 149, 297, 314, 323, 398, 390, 391.
 Horsehide, 317, 393.
 Horse-mint, 191, 405.
 Horse race, 154, 484.
 Horse raising, 257, 258.
Hosackia, 193.
Hosackia Wrightii, 192.
 Houck's Tank, 56.
 House (*see* hogan), 40, 327 *et seq.*, 355.
 House, dedication, 329.
 House God, 356, 383, 384, 388, 390, 390.
 Houses on high people, 428.
 House song, 329.
 Humming after dark, 511.
 Hummingbird, 161.
 Hummingbird food (*bot.*), 113.
 Hummock, 204.
 Hunch, 390.
 Hunchback, 100, 385, 388, 391.
 Hunch-eye, 352, 388.
 Hunger monster, 350.
 Hunting, 349, 350, 474, 509.
 Husband, 118.
 Hupa, 76.
 Hyades, 44.
 Hydrophobia, 107.
Hymenoptera, 166.
 Hyperbole, 495.
 ICE, 47 *et seq.*
 Idler, 492.
 Illumination, 40, 66.
 Imbricated rim on basket, 295.
 Imitation of mask, 398.
 Immorality, 350.
 Impassable crevice monster, 350.
 Impassable snake monster, 350.
 Implements, modern, 267, 268.
 Implements, stone, 62.
 Implements, weaving, 240.
 Implements, wood, 62.
 Importance of ceremony, 106.
 Imprecation, 444, 445.
 Incense, 65, 418, 500.
 Incest, 350.
 Incurable disease, 107, 109.
 Indentation, 298.
 Index finger, 69.
 Indian Affairs, Department of, 439.
 Indian currant, 184.
 Indian judges, Board of, 439.
 Indicator, 496.
 Indigo, 232, 233, 246, 293.
 Indisposition, 109.
 Indolence, 250, 437.
 Industry, 221 *et seq.*, 437.
 Infanticide, 450.
 Infidelity, 449.
 Influence of singer, 382.
 Inhaling breath of sand painting, 399.
 Inhaling fumes, 418.
 Inhaling smoke, 506.

Inhaling sun's breath, 372, 373.
 Initiation ceremony, 498, 500.
 Initiation of singer, 43.
 Inner bark, 116, 208.
 Insects, 164 *et seq.*
 Inside surface seam shoe, 307.
 Insignia, 377.
 Insomnia, 110.
 Installation of chief, 422.
 Intercession, 446.
 Interest on loans, 492.
 Inter-marriage, 110, 425, 427, 431, 449, 509.
 Interment, 453 *et seq.*
 Internode (of reed), 391, 396.
 Interruption of ceremony, 508.
 Intersection in basket design, 294.
 In the rincon people, 428.
 Intimidation, 443.
 Intoxicants, 217.
 Invisible stitch, 307.
 Invitation, 381, 419, 421.
 Invocation, 48, 69.
Iris, 191.
 Irish mail, 273.
 Iron, 62, 65, 255, 269, 273, 274, 278, 279, 316, 319.
 Iron hoe, 266.
 Iron ore, 65.
 Iron-wood, 188.
 Irony, 128.
 Irrigation, 32, 264.
 Isinglass, 64.
 Itch, 108, 110, 113.
 Itch remedy, 199.

JACKET, 66.
 Jackrabbit, 175, 213, 511.
 January, 59.
 Jar, 400.
 Jaybird, 162.
 Jealousy, 87.
 Jellycake, 210.
 Jemez, 26, 294.
 Jemez clan, 426, 427, 428, 429, 431.
 Jerked meat, 212, 216.
 Jet black, 230, 245, 246 *et seq.*
 Jewelry, 281.
 Jimson-weed, 199.
Jish, 374, 381, 383, 390, 402.
 Joint fir, 293.
 Joking, 450, 475.
 Journey, 114, 509.
 Juice, 349.
 July, 59.
 Jumping, 60.
 June, 59.
 Juneberry, 198.
 Juniper, 31, 112, 234, 274, 293, 304, 366, 371, 392, 396, 497.
Juniperus occidentalis, 232.
 Justice, 439.

KEROSENE, 270.
 Kettle, 276.
K'hiya-ani cap, 461.
K'hiya-ani clan, 356, 427, 428.
 Kinship, 424, 434 *et seq.*
 Kiss, 505.
 Kit Carson's invasion, 34.
 Kit-fox, 140, 175, 348, 349, 390, 392.

- Kit-fox collar, 390, 413.
 Kit-fox skin, 377, 430.
 Kneading, 288.
 Knife, 47, 62, 212, 219, 275, 298, 386, 456.
 Knife awl, 305.
 Knife chant, 364, 401, 407.
 Knife of Slayers, 62, 411, 412, 417.
 Knitting, 255, 256.
 Knot, 62, 186, 315, 415, 416, 417.
 Knowledge, 87.
 Knowledge of rites, 106.
 Knowledge of singer, 43, 406.
 Knuckles, measure, 73.
Krynitzkia crassispala and glomerata, 183.

 LACED POLE, 483.
 Laced twig cradle, 468.
 Lacing cord, 471.
 Lacing loop, 470.
 Ladder, 327, 352.
 Ladle, 286.
 Lake Athabasca, 29.
 Lamb, 258.
 Lambs' quarters, 185.
 Lamp, 40, 66, 270, 374.
 Lampers, 153.
 Land, 36, 61.
 Landmark, 265.
 Land tenure, 265.
 Language, 91, 356, 398.
 Language, study of, 180.
 Lard, 212.
 Lariat, 314.
 Larkspur, 197, 400.
 Lassoing, 148, 314.
 Lather, 50, 115, 417.
 Latrine, 270, 502.
 Lash, yucca, 391, 392.
 Laughter, 499, 502.
 Lava, 63.
 Law, 257, 440.
 Law of butt and tip (*see* butt), 404, 418.
 Leading dancer, 379, 397.
 Leaf people, 428.
 Leather, 256, 372, 381, 314.
 Leatherwork, 311 *et seq.*
 Left stitch, 256.
 Left thunder, 61.
 Left wind, 46.
 Legend, 28, 91, 171, 222, 286, 347, 353, 355, 360, 361, 362, 425, 468, 473, 479, 485, 487, 495.
 Legends, Navaho, by Dr. Matthews, 23, 29, 364, 401.
 Legerdemain, 377, 419, 430, 502.
 Legging, 255, 256, 280, 465.
 Legging cord, 249, 460.
 Leopard, 140.
Lepidium montanum, 188.
Lepidoptera, 167.
 Lewdness, 363, 395.
 Lewdness, remedy for, 409.
 Lice, 168, 170, 341.
 License, 504.
 Lichen, 204.
 Life chant, 364.
 Life chant equipment, 403.
 Life hereafter, 346, 352.
 Life medicine, 114.
 Light, 40, 56, 66.
 Light-colored soil people, 428.

 Lightning, 60 *et seq.*, 222, 286, 346, 349, 390, 391, 399, 417.
 Lightning chant, 192, 363, 383, 396, 414, 418, 496.
 Lightning chant equipment, 403.
 Lightning chant (female), 364.
 Lightning chant medicine, 409.
 Lightning mountain chant, 364.
 Lightning stroke, 117.
 Lightning struck ashes, 404.
 Lightning struck charcoal, 414.
 Lightning struck pitch, 414.
 Lightning struck tree, 469.
 Lightning struck wood, 414.
 Line drawing on sand, 74.
 Line of life, 286, 294, 375.
Linum, 194.
 Liniment, 113, 115, 116, 371, 403, 404 *et seq.*
 Lintel, 331.
 Lime, 64.
 Limestone, 61.
 Lipanes, 28.
 Lipfern, 189.
Lithospermum, 183.
 Little Colorado River, 23, 264.
 Live coals, 418.
 Live feather, 412 *et seq.*
 Liver, 213.
 Liver-bag mixture, 410.
 Living arrow people, 429.
 Lizard, 156, 176.
 Loan, 492 *et seq.*
 Local names, 120 *et seq.*
 Locust, 165, 351, 352.
 Locust Man and Woman, 348.
 Lodge, 377.
 Log, 273.
 Loghouse, 434.
 Loincloth on painting, 399.
 Lone tree people, 428.
 Longitudinal stitch, 307.
 Loom, 222, 235, 237, 245, 250.
 Loom pole, 243.
 Loom rope, 235, 236.
 Loop, 287.
 Looped string, 236.
Lophanthus urticifolia, 192.
 Los Torreones, 496.
 Lost property, 508.
 Louse (*see* lice).
 Louse-killer, 170.
 Louse Man, 171.
 Lousiness, 359.
 Lower, 137.
 Lower world, 137, 246, 247 *et seq.*, 353, 357, 362, 422.
 Lukachugai Mountains, 31.
 Lung tissue, 404.
 Lupine, 192, 409.
Lupinus, 192.
Lycium pallidum, 300.
Lygodesmia rostrata, 186, 395.
 Lying, 440, 508.
 Lynx, 140.
 Lynxhide, 439.

 MAGIC, 377, 419.
 Magic influence, 105.
 Magpie, 159, 365.
 Mail carrier, 510.

- Malze, 190, 270.
 Male fish, 177.
 Male God, 384, 388, 390.
 Mallow, 194, 195.
 Malpais, 63.
 Maltese cross, 258, 294.
 Man-eating animals, 213.
 Man-eating fish, 177.
 Man-eater, 357.
 Mane, color of, 71.
 Manslaughter, 439.
 Many goats clan, 439.
 Many hogan people, 429.
 Many prayersticks, 398.
 Marauding, 257.
 Marbles, playing, 488.
 March, 59.
 Marigold, 187.
 Mariposa lily, 198.
 Marking, 59, 386, 387.
 Marriage ceremony, 395, 432, 433, 448, 449.
 Marriage custom, 432, 446 *et seq.*
 Marriage gift, 446.
 Marsh wren, 161.
 Mask, 47, 65, 140, 159, 178, 339, 377, 378, 384
et seq., 385 *et seq.*, 400, 418, 498.
 Masked personator, 376, 385, 391, 420, 498,
 508.
 Masonry, 394.
 Master of ceremonies, 453.
 Match, 66 *et seq.*, 104.
 Matrix, 278, 287.
 Matthews, Dr. W., U. S. A., 23, 29, 43, 230,
 231, 232, 271, 361, 362, 364, 401, 431.
 Mattock, 265, 268.
 Mattress, 467.
 May, 59.
 Meadow-grass, 191.
 Meadow-lark, 161, 173.
 Meadow people, 429.
 Meadow rue, 115, 183, 371, 409.
 Meal at ceremony, 378.
 Meal sprinkler, 377, 378.
 Measles, 108, 113.
 Measure, 73, 94, 306, 331, 366, 386, 396, 461,
 479, 481, 482, 483.
 Meat, 216.
 Medicine, 106, 117, 179, 267, 299, 356, 402, 403,
 406 *et seq.*, 408, 410, 414.
 Medicine bowl, 407, 414.
 Medicine cup, 157, 407, 408.
 Medicine lodge, 328, 381, 430.
 Medicine men (*see* singer), 423.
 Medicine pouch or bag, 106, 371, 381, 382,
 390, 392, 402, 403, 406, 410, 419.
 Medicine spoon, 407, 408.
 Medicine twig, 114.
 Melon, 261, 267.
 Melted tallow, 213.
 Men, names of, 121 *et seq.*
Menodora scabra, 195.
 Menstruation, 109, 446.
 Mental derangement, 350, 426.
Mentzelia, 115, 194.
 Mescalero Apache Indian, 439.
 Mescalero Apache Indian clan, 431.
 Metal, 271.
 Metal awl, 309.
 Metate, 63, 206, 306, 307.
 Meteor, 45.
 Messenger, 377, 381, 419.
 Mexican, 24, 26, 64, 91, 120, 143, 223, 226, 232,
 246, 247, 249, 271, 356, 368, 487, 439, 499.
 Mexican clan, 429.
 Mexican dollar, 276, 278.
 Mexican, old, 129.
 Mexican rug, 247.
 Mexico, 142, 232.
 Mica, 64.
 Migration, 23.
 Mile, 74.
 Milestone, 74.
 Milfoil, 115, 185.
 Milk, 204, 205, 206.
 Milk vetch, 115, 192.
 Milkweed, 114, 116, 182.
 Milky way, 39, 44, 353.
 Millstone, 207, 219.
 Mind, 87.
 Minerals, 32, 64.
 Mining, 64, 274, 276.
Mirabilis, 195.
 Mirage, 40, 41.
 Miser, 509.
 Mist, 46.
 Mistletoe, 191, 405.
 Misunderstanding, 442.
 Mitten, 256, 460.
 Mixed waters, 400.
 Moccasin, 104, 256, 280, 308, 310, 363, 465, 485,
 486.
 Moccasin, decoration of, 295.
 Moccasin game, 70, 77, 311, 485, 507.
 Moccasin making, 305.
 Mocking-bird, 161, 163, 172.
 Moderation, 222.
 Mohave clan, 431.
 Moisture, 265.
 Mold, 274, 288.
 Molding the body, 446.
 Mole, 110.
 Molten silver, 274.
Monarda, 191.
 Money, 490.
 Monocline people, 439.
 Month, 58, 59.
 Monster, 139, 171, 352, 357, 375.
 Monster eagle or crane, 159, 357.
 Monster who kicks from the cliff, 358.
 Monster who kills by the charm of the
 eye, 358.
 Monte, 478.
 Moon, 37, 353, 359, 402, 438, 448.
 Moon bearer, 37, 41, 353, 357, 360.
 Moon, death of, 41.
 Moon, eclipse and phases, 41 *et seq.*
 Moon, prayerstick of, 306.
 Moon, sex of, 354.
 Moon trail, 354.
 Moonlight, 37, 42.
 Moqui reservation, 31.
 Mormon, 129.
 Mormon tea, 114.
 Morning star, 38, 39.
 Mordant, 229, 232, 298.
 Morice, A. G., 27.
 Mortuary custom, 424, 458 *et seq.*, 472, 497.
 Moss, 176, 203, 232.
 Mother-in-law, 447, 449.
 Mount Taylor, 56, 357, 400.

- Mountain, 31, 61 *et seq.*, 358.
 Mountain, animals of, 139 *et seq.*
 Mountain chant, 364, 365, 376, 377, 385, 392, 393, 396, 401, 507.
 Mountain chant equipment, 403.
 Mountain chant liniment, 405.
 Mountain chant medicine, 408.
 Mountain grass, 309, 341.
 Mountain lion, 175, 214, 425.
 Mountain lion skin, 321.
 Mountain lion skin cap, 461.
 Mountain mahogany, 196, 232, 243, 293, 304, 396, 407, 479.
 Mountain, neighboring, 139.
 Mountain rice, 190.
 Mountain tobacco, 389.
 Mounting, 91.
 Mourner, 453.
 Mourning, 451, 453 *et seq.*, 508.
 Mourning dove, 160.
 Mouse, 141.
 Mouse colored, 72.
 Mouse-ear, 184, 405.
 Mouth of bull-roarer, 414.
 Mouth of stream, 50.
 Mouth on mask, 387.
 Moving upward, 362.
 Moving upward chant, 222.
 Moqui (*see* Hopi), 56.
 Moqui reservation, 34.
 Mud, 272, 288.
 Mud-hen, 173.
 Mud people, 352, 429.
 Mule, 214.
 Murder, penalty for, 439.
 Mush, 204, 205, 215.
 Mushroom, 204.
 Muskmelon, 156.
 Muskrat fur, 413.
 Muskrat headband, 462.
 Must, 203.
 Mustache, 83.
 Mutilation, 112.
 Mutton, 204, 211 *et seq.*
 Mutton tallow, 274.
 Myth, 30, 178.

 NADIR, 55, 137.
 Nail, 209, 319.
 Naming a child, 119.
 Narrative of legend, 507.
Nasturtium alpinum, 188.
Nasturtium obtusum, 187.
 Native enemies, 359, 362, 375.
 Native Races of the Pacific States, by H. H. Bancroft, 27.
 Natural phenomena, 35, 45.
 Nausea, 109.
 Navaho, meaning of word, 23 *et seq.*
 Navaho, orthography of, 26 *et seq.*
 Navaho, pronunciation of word, 26 *et seq.*
 Navaho blanket, 223 *et seq.*
 Navaho houses, 327.
 Navaho Mountains, 400.
 Navaho wind chant, 363.
 Necklace, silver, 277, 278, 301, 464.
 Needle, 299, 305, 310.
 Needle, darning, 238, 242.
 Needle, knitting, 255.
 Needle, steel, 255.

 Needle, wooden, 241, 242.
 Negro, 440.
 Nephew, 119.
 Nervousness, 116.
 Nether world, 453.
 Nettle, 200.
Neuroptera (zool.), 167.
 New Jersey tea, 116, 197.
Nicotiana, 199.
 Night, 39.
 Night chant, 173, 204, 207, 208, 228, 333, 339, 342, 364, 376, 377, 378, 384, 392, 393, 394, 396, 397, 401, 413, 420, 496, 500, 502, 507.
 Night chant liniment, 405.
 Night chant medicine, 408.
 Night chant to the rocks, 388.
 Night chant to the water, 388.
 Nightmare, 111.
 Nightshade, 200.
 Nine night ceremony, 363, 365, 508.
 No cedar (*see* plain gruel), 205, 447.
 Nomadic life, 327.
 North star, 45.
 Nose of constellation, 43.
 Nosebag, 151.
 Nose bleeding, 108.
 Nose bleeding, remedy for, 112.
 Nose trouble, 112.
 Notched stick, 402.
 November, 50.
 Nozzle, 273.
 Nubility ceremony, 207, 355, 359, 363, 412, 446.
 Nuclear clans, 425, 426.
 Number, 76 *et seq.*
 Number of Navaho, 34.
 Number of patients, 377, 378.
 Number of prayersticks, 397.
 Number of worlds, 35.
 Numerals, 76 *et seq.*
 Nurse, 451.
 Nursing, 451, 455.
 Nut, 211.

 OAK, 188, 299, 318, 329.
 Oats, 190, 262.
 Obsidian, 328, 410.
 Obstetrics, 107.
 Ocean, 36, 50, 354.
 Ocean water, 400.
Ochocentrus, 185.
 Ochre, 63, 230, 245, 303.
 Ochre, blue, 293.
 Ochre, yellow, 69.
 Octagonal hogan, 333.
 October, 58.
 Odor, 69.
Oenothera, 195.
 Offal, 341.
 Oil, 65.
 Oil cropping, 65.
 Old age, 359.
 Old folk, 118, 366.
 Old gold, 231.
 Old smith, 271.
 Olivella, 301, 408, 407, 408, 410, 417.
 Olivella charm, 421.
 Olla, 392.
 Omen, 451, 501, 509.
 One day song chant, 364.

- One night ceremony, 368, 366, 402.
 Onion, 198.
 Onion stew, 309.
 Open field, 496.
 Opening in sky, 35, 36.
 Opening in bow and queue, 367.
 Opening line, 375.
 Opening of corral, 377.
Opuntia, 183, 184.
 Oraibi, 383.
 Orange, 183.
 Orange dye, 231, 228, 304.
 Ordinal numbers, 76 *et seq.*, 78 *et seq.*
 Oriental rug, 223.
 Origin of clans, 425, 427.
 Origin of the name Navaho, by Edgar L. Hewett, 24.
 Orion, 43.
 Ornament, 276, 279, 465.
Orthoptera (scol.), 165.
Oryzopsis cuspidata, 190.
 Otter, 156, 177, 178, 214, 439.
 Otter headband, 468.
 Otter skin collar, 413.
 Oven, 207, 208, 218.
 Overdoing basketry, 404.
 Overdoing weaving, 222, 247, 500.
 Overhanging rock people, 429, 430.
 Overshoe, 47, 308, 465.
 Overwhelming vagina monster, 358.
 Owl, 158, 173, 349, 405.
 Owl feather, 389, 394, 461.
 Owl Man and Woman, 158.
 Owls, 209, 405.
 Ownership, 258.
 Oxidized silver, 275, 277.
Oxytropis, 114, 192, 304.

 PACM (measure), 73.
 Pack, 299.
 Pack-saddle, 149.
 Painted cup, 114, 199.
 Painting, 289.
 Painting of mask, 388.
 Palate, 291, 292.
 Palate clan, 431.
 Pajarito Park, 24.
 Palpitation, 109.
 Paper, 250, 251, 270.
 Paper bread, 207, 212, 432.
 Paper clay, 301.
 Paper money, 490, 491.
 Parallelogram, 75.
 Paraphernalia, ceremonial, 402 *et seq.*
 Parasol, 40.
 Parched corn, 305.
 Parsnip, 231.
 Passion, 350.
 Pastime, 478.
 Pastoral life, 257.
 Paternalism, 440.
 Patient, 66, 69, 119, 292, 342, 343, 371, 372, 376, 394, 417, 508.
 Patient, number of, 377, 397.
 Patient, position of, 53.
 Patronymic, 119.
 Paunch, 213, 298.
 Pauper, 492.
 Pawn, 498 *et seq.*
 Pea, 198.
 Peach, 31, 198, 211.
 Peach stew, 209.
 Peanut, 193.
 Pearl, 410.
 Pebble, 63, 69, 298, 402, 488.
Pectis angustifolia, 405.
 Pelado Peak, 56, 400.
 Pelt, 241.
 Penalty, 439.
 Pendant, 74, 279, 281.
 Pennycress, 115, 189.
 Pennyroyal, 187, 192, 371, 404, 409.
Pentstemon, 199.
 People, 246 *et seq.*
 People at the edge of water, 352, 429.
 People at the end of the head, 39.
 People formed of her back, 427, 428.
 People formed of her breast, 427, 428.
 People of the earth, 352, 353, 356.
 People of the white valley, 428.
 Pepper, 196, 217.
 Pepper, Dr. Geo. H., 231.
 Pepper-grass, 183.
 Peppermint, 200, 409.
 Peridot, 63, 234.
 Periphery, 263.
 Persons, names of, 118.
 Personal names, 119 *et seq.*
 Perspiration, 111, 342.
 Perspiration of feet, 116.
 Pet, 356, 367, 425, 427.
Petalostemon candidus, 192.
 Petitot, F., 28, 29.
 Petrified, 28, 30, 63.
Phacelia glandulosa, 191.
 Phases of moon, 41 *et seq.*
 Phenogamous herbs, 180.
 Phlox, 405.
Phlox coccinea, 196.
Phlox Douglasii, 188.
Phoradendron juniperum, 191.
Phragmites andina, 191.
Phragmites communis, 190.
 Phratry, 425, 426.
Physalis lanceolata, 190.
Physaria, 188.
 Physician, American, 108.
 Picking fruit, 216.
 Pig, 142, 496.
 Pigweed, 185, 209, 395, 405.
 Pillar of sky, 35, 354.
 Pillow, 468, 471.
 Pillow of bull-roarer, 414.
 Pima, 291.
 Pima clan, 418.
 Pimple, 107, 110, 113.
 Pimple medicine (bot.), 112, 115, 212.
 Pine, 31, 65, 66, 148, 414, 469.
 Pine arrow, 418.
 Pine gum, 293, 297.
 Pine needle, 371.
 Pine wart (*see* punk), 219.
 Pinon, 31, 66, 214, 230, 243, 257, 291, 415, 469.
 Pinon butter, 211.
 Pinon gum, 297.
 Pinon leaves, 409.
 Pinon nut, 203, 211, 267.
 Pinon pollen, 400.
 Pinonero, 162.
 Pipe, 287, 305, 506.

- Pit, 267.
 Pitahaya, 211.
 Pitch, 230, 245, 303, 318, 458.
 Pitcher, 296.
 Pith, 208, 210.
 Places, names of, 130 *et seq.*
 Pit trap, 475.
 Plain gruel, 372, 447.
 Plains Indians, 143, 437.
 Plaiting, 256, 297.
 Plane, 269.
 Plant in ceremony, 414 *et seq.*
 Plant list, 181, 202, 216.
 Plant, unidentified, 201, 202.
 Plantain, 196.
 Planting, 23, 263, 265, 353.
 Planting, ceremonial method of, 350.
 Planting stick, 265, 267.
 Plaster, 334.
 Plate, 219.
 Plaiting, 313, 315.
 Pleiades, 38, 44.
 Pliers, 275.
 Plow, 267, 273.
 Plowing, 265.
 Plug tobacco, 506.
 Plumed thistle, 115, 185.
 Pneumonia, 108.
 Pocket, 311.
 Pocketbook, 490.
 Pocketknife, 305.
 Poison, 108, 186, 349.
 Poison ivy, 182.
 Poker, 66, 68, 329, 415.
 Pole, 235, 249, 331.
 Pole, measured, 73.
 Poles strung out at the water people, 428.
 Polish, 275, 301.
 Polished pole, 483.
 Pollen, 176, 197, 222, 297, 308, 328, 380, 396,
 391, 396, 399 *et seq.*, 404, 417, 448, 476, 499.
 Pollen bag, 399, 419.
 Pollen sprinkler, 419.
 Polyandria, 433.
 Polygamy, 118, 433, 449.
 Population, 33.
Populus, 198.
 Porcupine, 142, 174, 178, 356, 394, 425.
 Porcupine constellation, 44.
 Porcupine (food), 214.
 Porcupine quill, 308, 309, 412.
 Porridge, 204, 205, 209, 235, 447, 448.
 Post, 235, 243.
 Pot, 229, 230, 233, 287, 299, 303, 308.
 Potato, 200, 204, 210.
 Pot-drum, 370.
Potentilla, 197.
 Potter, 282, 286, 288.
 Pottery, 285.
 Pottery making, 285 *et seq.*, 288, 327.
 Pottery material, 288.
 Poultice, 117.
 Pouch, 280.
 Pouch of chanter (*see* medicine pouch),
 382.
 Pouch, leather, 311.
 Poverty, 359, 437.
 Powderhorn, 325.
 Prairie clover, 192, 405.
 Prairie dog, 142, 176, 212, 319.
 Prairie dog hunting, 476.
 Prayer, 137, 171, 257, 372, 475.
 Prayerstick, 68, 155, 157, 159, 171, 172, 173,
 222, 349, 378, 389, 394, 396 *et seq.*, 410, 497.
 Prayer to the gods, 137, 222, 408.
 Precious stone, 222, 328, 353, 356, 394, 404,
 409 *et seq.*, 410, 411, 476.
 Precious stone mountain, 137.
 Precipitation, 32.
 Pregnancy, 368, 379, 380, 450, 496.
 Prejudice, 442.
 Premature birth, 451.
 Pressing of the limbs, 372, 411, 414, 446.
 Pricking vagina monster, 358.
 Prickly pear, 184, 211.
 Primrose, 115, 195.
 Privation, 437.
 Production of rats, gophers, etc., 419.
 Prohibitive degrees in marriage, 426, 437.
 Pronged cap, 462, 463.
 Pronouns, 119.
 Pronunciation, 91.
 Property, 265, 450.
 Property, division of, 258.
 Prospecting, 32.
 Prostitution, 379, 450, 504.
 Prostitution chant, 364, 366.
 Prototype of hogans, 328.
 Provision on journey, 206, 210, 211, 212,
 257, 267.
 Prune, 197.
Psoralea tenuiflora, 193, 395.
 Puberty, 389.
 Public dance and exhibition, 40, 217, 308,
 309, 335, 378, 391, 392.
 Pueblo, 63, 80, 120, 128, 143, 218, 221, 226, 253,
 285, 286, 287, 291, 300, 327, 356, 357, 374, 394,
 400, 401, 425, 426, 458, 489.
 Pueblo Bonito, 410.
 Pueblo legend, 367.
 Pueblo villages, names of, 135, 437.
 Puffs, 210.
 Pulmonary disease, 107, 108, 410.
 Pulp, 116.
 Pulverized stone, 69.
 Puma, 69, 140, 175.
 Pumpkin, 188, 261.
 Punch, iron, 275, 278.
 Punk, 203, 295.
 Pupil, 42, 381, 507.
 Purification, 350, 378, 451.
 Purling, 257, 439.
 Purple, 72, 234.
Purshia, 198.
 Pus, 108, 110.
 Puye, 24, 25.
 QUAIL, 159, 173.
 Quadruped, 139.
 Quaking asp, 198.
 Quarantine, 107.
 Quarrel, 439 *et seq.*
 Quarreler Indian, 29.
 Quarry, 64.
 Quartzite, 63.
Quercus, 188.
 Queue, 80, 81, 391.
 Queue figure, 252, 267, 375.
 Quirt, 150, 314.
 Quiver, 140, 321.

- RABBIT, 141, 175, 298.
 Rabbit dummy, 476.
 Rabbit fur, 457.
 Rabbit hunt, 476.
 Race, 94.
 Race suicide, 450.
 Raiding, 257, 259, 308, 309, 423, 438.
 Rain, 46 *et seq.*, 54, 349, 356.
 Rainbow, 46 *et seq.*, 251, 296, 343, 359, 390, 468.
 Rainray, 47, 222.
 Rain-water, 49.
 Rake, 368.
 Rape, 439, 443, 450.
 Rasp, 369.
 Rat, 141, 176, 314.
 Rattle, 173, 391, 392, 400, 401, 413.
 Rattle bearer, 369, 370, 372, 375.
 Rattle of deer toes, 367.
 Rattle-pod, 192.
 Rattlesnake, 155, 176, 508.
 Rattle-stick, 366.
 Rattle-weed, 192, 198, 408, 409.
 Rawhide, 148, 150, 305, 306, 313, 317.
 Rawhide rope, 314.
 Rayless golden rod, 115, 186.
 Reach (measure), 73.
 Recess for mask, 331, 339.
 Recipe, 107.
 Recovery of sun and moon, 41.
 Red, 68, 69, 246 *et seq.*
 Red ant, 472.
 Red ant chant, 364.
 Red bear constellation, 44.
 Redbush, 432.
 Red clay, 65, 69, 70, 298, 372, 388, 404, 410.
 Red dye, 232, 302, 304.
 Red God, 385, 388, 390, 392.
 Red house people, 430.
 Red lefties clan, 430, 432.
 Red medicine, 115.
 Red pepper, 190.
 Red rock bend people, 430.
 Red sash, 249.
 Red soil people, 430.
 Red stone, 390.
 Red striped shirt, 248, 458.
 Red-white stone, 56, 64, 402, 410.
 Red world, 35, 73, 347, 348.
 Reddle, 410.
 Reed, 190, 223, 394, 396, 408.
 Reed arrow-shaft, 319.
 Reed people, 429.
 Reed shaft, 182.
 Refugee, 426.
 Relatives, 119, 424, 449.
 Relatives, names of, 435.
 Relic, family, 309, 317.
 Religion, 139, 251, 328, 346 *et seq.*, 425.
 Religious character of disease, 106 *et seq.*, 107.
 Remarriage, 449.
 Remedy, 43, 107 *et seq.*, 112 *et seq.*, 180, 343, 349, 379, 408 *et seq.*, 406 *et seq.*
 Removing wool, 213.
 Repairing a shoe, 307, 308.
 Report, Indian Commissioner's, of 1854, 223.
 Report, Lieut. James H. Simpson, 271.
 Report on the Southwest, A. F. Bandler, 25.
 Reptiles, 155 *et seq.*, 176.
 Reservation, area of, 30 *et seq.*
 Reservoir, 49, 264.
 Residence, 33.
 Respect for ceremony, 350, 499.
 Resuscitation, 350.
 Reunion of men and women, 260.
 Rheumatism, 109, 114, 292.
Rhus, aromatica, 182.
Rhus toxicodendron, 182.
Ribes, 190.
 Rice, 191.
 Riding, 40, 148.
 Rifle, 326.
 Rind, 303.
 Ring, 249, 281, 283.
 Ring around sun, 37.
 Ringing of the ear, 509.
 Ringworm, 108.
 Rising sand monster, 359.
 Rite, 69, 213, 251, 474, 475.
 Ritual, 68, 328, 398.
 River, 31.
 Road-runner, 159, 372, 412.
 Roast, 212.
 Roast on stick, 212.
 Roasting ears, 308.
 Robe, 302, 425.
 Robin, 161.
 Rock alum, 304.
 Rock cress, 115, 187, 406.
 Rock crystal, 63, 308, 386, 394, 399, 404, 410, 506.
 Rock crystal heal, 222.
 Rock lizard, 176.
 Rock pass people, 430.
 Rock salt, 231, 275.
 Rock sulphur, 398.
 Rocky Mountain Indians, 23, 30.
 Rodent, 141.
 Roll-cake (yucca), 210.
 Roman cross, 251.
 Roof of hogan, 323.
 Root, 229.
 Rope, 148, 249, 314.
 Rope bridle, 150.
Rosa Fendleri, 197.
 Rosin, stone, 112.
 Rosin, tree, 112, 395.
 Roundbill crane, 173.
 Round cake, 307.
 Round hogan, 323.
 Roundup, 258.
 Rowing, 52.
 Rubbing, 66.
 Rubber plant, 115.
 Rubber sling, 225.
 Ruby, 64.
 Rug, 241, 244.
 Ruin, 25, 30, 357, 396.
Rumex, 231.
Rumex hymenosepalum, 197, 231.
 Run, 94, 437.
 Running an enemy down, 373.
 Running ear, 108.
 Rush-grass, 190, 191.
 Russian thistle, 181.
 SACK RACE, 94.
 Sacred blood, 413.

- Sacred buckskin, 302, 309, 322, 324, 326, 411, 413, 414.
 Sacred clay, 409.
 Sacred knot, 412.
 Sacred mountain dust, 410, 411.
 Sacred mountain dust bag, 410, 419.
 Sacred mountains, 56, 70, 136, 251, 349, 353.
 Sacred name of animals, 139, 171 *et seq.*, 304.
 Sacred place, 357.
 Sacred sinew, 326, 413.
 Sacred stone, 399.
 Sacred tallow, 410.
 Sacred tallow horn, 413.
 Sacred water, 387.
 Sacrifice, 105, 139, 171, 208, 222, 349, 356, 394, 396, 410, 476.
 Sacrifice to the bear, 214.
 Sacrifice to the shelves in the rock, 399.
 Sacrifice to the talking stone, 399.
 Sacrificial basket, 397.
 Sacrificial stones, 56.
 Saddle, 148 *et seq.*, 149, 456.
 Saddlebag, 149, 372.
 Saddle blanket, 149, 214, 309, 399, 456, 499.
 Saddle horse, 455, 456.
 Sage, 191.
 Sagebrush, 32, 115, 116, 186, 257, 369, 416.
 Sagebrush bark, 398.
 Sagebrush knolls people, 429.
 Sailing boomerang, 324.
 Saliva, 274, 279.
 Saliva glucose, 205, 206, 207, 208, 309.
Salvia Kali, 181.
 Salt, 114, 209, 212, 214, 217.
 Salt lake, 410.
 Salt Man and Woman, 348, 349.
 Salt people, 431.
 Salt, sacred, 410.
 Saltweed, 185.
 Salted dumplings, 308.
 Salted griddle cake, 308.
 Salutation, 506.
 Saluting the sun, 372.
Salvia canescens, 191.
 Sample roll of prayersticks, 398.
 San Francisco Mountains, 56, 112, 202, 356, 400.
 San Felipe clan, 431.
 San Juan agency, 34.
 San Juan Mountains, 56, 400.
 San Juan River, 31, 264.
 Sand, 63, 66, 250, 275, 398.
 Sandhill crane, 160, 408.
 Sand painting, 55, 69, 70, 74, 137, 155, 157, 171, 300, 398, 399, 410, 487, 507.
 Sandpaper, 275.
 Sandstone, red, 69, 274, 275, 398.
 Sandstorm, 46, 53 *et seq.*
 Sandwort, 184.
 Santa Clara Indians, 25.
 Santa Fe, 46.
 Sapsucker, 180.
Sarcobatus, 184.
 Sash, woman's, 248, 249, 312.
 Sash loom, 249.
 Satellite, 43.
 Sausage, 212.
 Say's Phoebe, 161, 172.
 Scabbard, 280.
 Scabby, 108.
 Scalp, 266, 268, 374, 391, 438.
 Scalping, 438.
 Scar, 110, 317.
 Scarabee, 164.
 Scarification, 506.
 Scarlet, 232.
 Scissors, 269.
 Scorpion, 45, 168, 174.
 Scorpion constellation, 44.
 Scraper, 267.
 Scraping stick, 302, 308.
 Scratching implement, 372, 373.
 Screech owl, 173.
 Scrub, 51.
 Scrub-oak, 31, 69, 188, 240, 243, 416.
 Scythe, 266, 268.
 Seam, 256.
 Season, 58.
 Second Made, 348.
 Secret name, 119.
 Secretion of the eye, 395.
 Security, 492.
 Seed, 203, 353.
 Seed foods, 309.
 Seeing the gods, 498, 500.
 Selection of chant, 379.
 Selling, 491.
 Selvedge, 308, 309.
Senecio Douglasii, 187.
 Sensitive brier, 115, 192.
 Sentinel, 437.
 Separation of men and women, 350 *et seq.*
 September, 59.
 Serape Navaho, 223.
 Service berry, 198, 211.
 Setting of ring, 284.
 Settlement, 265.
 Settlement of disputes, 439.
 Seven card game, 497.
 Sewing, 292, 297 *et seq.*, 306, 386, 398, 461.
 Sewing needle, 310.
 Sex of earth and sky, 35, 354.
 Sex of Peoples, 354.
 Sex of sun and moon, 37.
 Sexual intercourse, 433.
 Shade, 40, 334, 335.
 Shadow, 40.
 Shaggy blanket, 244, 245.
 Shalako dance, 398 *et seq.*
 Shaman, 42, 180, 377, 381, 398, 399, 474.
 Shaman of other tribes, 394.
 Shame, 443.
 Shanker, 108.
 Shape, 276, 277.
 Shape of earth, 36.
 Shawl, 246, 249.
 Shearing, 257, 258.
 Shears, 258, 275.
 Sheep, 143, 224 *et seq.*
 Sheep brains, 302.
 Sheep corral, 258.
 Sheep, creation of, 356.
 Sheep-dip, 224, 225, 259.
 Sheep dung, 116, 298.
 Sheep-head, 213.
 Sheep-pelt, 149, 300, 467.
 Sheep-pelt basket, 299 *et seq.*
 Sheep raising, 257, 258.
 Sheepskin, 237, 272, 390.
 Sheepskin shoes, 47.

- Sheep wool, 388.
 Sheet lightning, 60, 222, 251, 318
 Shell, 507.
 Shell bead, 301, 439.
 Shelter, 40, 334, 336.
 She-rain, 47, 448.
 Shield, 317, 423, 437, 456, 465.
 Shield, decoration of, 46.
 Shiny, 487.
 Shiny stick, 485, 488.
 Shiprock, 357, 364.
 Shiprock agency, 34.
 Shirt, 248, 464.
 Shoe, foreign, 310.
 Shoemaking, 305.
 Shoe, sheepskin, 47.
 Shoe, snow, 47.
 Shoe, wooden, 47.
 Shoe, yucca, 308.
 Shooting evil, 346.
 Shooting God, 383, 420.
 Shooting star, 45.
 Shotgun, 323.
 Shoulder-band, 372, 413 *et seq.*, 417.
 Shoulderblade, 366.
 Shoulderblade hoe, 366.
 Shoulder pouch, 66, 465, 479.
 Shovel, 267.
Skrankia, 192.
 Shrub, 353.
 Shuttle, 241, 342, 287, 250.
 Sickle, 262.
 Sickness, 105 *et seq.*, 292, 348, 406, 496.
Sidalcea malvaeflora, 196.
 Side hoe, 366.
 Sifting, 263.
 Sighing, 391.
 Sight, 88.
 Sight, divination by, 365.
 Signaling, 67, 437, 454, 463.
 Signers of treaty, 125.
Silene Douglasii, 184.
 Silkweed, 112, 116, 182.
 Silver, 64 *et seq.*, 150, 287.
 Silver dust, 279.
 Silver ornament, 284, 453, 498.
 Silversmith, 271, 277, 287.
 Silversmithing, 271 *et seq.*
 Simpson, Lieut. James H., 223, 271.
 Sinew, 182, 305, 306, 310, 318, 319, 458, 511.
 Sing, 163.
 Singer, 42, 66, 69, 106, 107, 292, 295, 347, 361, 362, 367, 375, 381, 397, 417, 422, 423, 475, 496.
 Singing, 105, 302, 507.
Sisymbrium incisum, 188.
Sisyrinchium mucronatum, 198.
 Site of hogan, 330.
 Sixshooter, 312, 326.
 Size of prayerstick, 366.
 Skein, 237, 242.
 Skeleton of hogan, 331.
 Skillet, 219 *et alibi*, 229, 230.
 Skipping, 454.
 Skipper bug, 177, 178.
 Skunk, 69, 142, 175, 349.
 Sky, 35, 36, 58, 353.
 Skyblue, 40, 55, 251, 328, 349.
 Skyblue Man, 383.
 Skyblue Woman, 383.
 Sky cord, 222.
 Sky Man, 354, 359.
 Slave, 259, 423, 424, 426, 438, 453, 454, 508.
 Slave clans, 426, 431.
 Slavery, 423.
 Slayer of Enemies or Monsters, 62, 359, 360, 361, 366, 375, 385, 387, 388, 390, 391, 411, 417, 428.
 Sled, 270.
 Sleeping, 509.
 Slender Silversmith, 271.
 Slicing reed monster, 358.
 Sling, 224.
 Slingshot, 75, 325.
 Slit-weave, 247, 509.
 Small birds, 159, 173, 394.
 Small change, 491.
 Small hoop, 416.
 Smallpox, 107 *et seq.*, 108, 109, 113.
 Smell, faculty of, 89.
 Smelling water, 287.
 Smelting, 273.
 Smith, 150.
 Smithy, 272.
 Smoke, 67, 139.
 Smoke-hole, 40, 67, 332, 399, 412.
 Smoking, 66, 287, 289, 395, 410, 506.
 Smoking game, 475.
 Smooth cap, 462, 463.
 Smooth pole, 483.
 Smooth stick spoon, 407.
 Smoothen, 275, 298.
 Snake, 155, 178, 251, 286, 425, 444, 496.
 Snake bite, 107, 117.
 Snake bite remedy, 155.
 Snake figure, 284.
 Snake People, 348.
 Snake rite, 496.
 Snare, 323.
 Sneezing, 497.
 Sneezeweed, 187, 298.
 Snipe, 160, 173.
 Snoring, 501.
 Snout of bear, 43.
 Snow, 47 *et seq.*
 Snow bath, 47, 437.
 Snowbird, 161, 213.
 Snowdrift, 54.
 Snowshoe, 47.
 Snowstorm, 47.
 Snow water, 401.
 Snuff, 112.
 Snuff, tail (*bot.*), 112.
 Soap, 50, 194, 224, 340.
 Sobriquet, 119.
 Social equality, 422.
 Soda pop, 217.
 Soil, 264, 265.
Solanum, 200.
 Solder, 274, 275, 279, 284.
 Sole, 306.
 Solid, 74 *et seq.*
Solidago nemoralis, 186.
 Solstice, 37.
Sonchus asper, 185.
 Song, 38, 79, 119, 137, 155, 171, 257, 446, 473.
 Sorrel, 231, 233, 293.
 Soul, 87, 353.
 Soup, 210, 211, 213.
 Sow thistle, 115, 185.
 Span, 73.

- Spaniard, 23, 24, 30, 232.
 Spanish, 257.
 Spanish bayonet, 194, 195.
 Spanish language, 91.
 Spanish needle, 187.
 Spasm, 110.
 Spear, 316, 437, 438, 465.
 Speckled, 68.
 Speckled farm, 204.
 Specular iron ore, 65.
 Speech, 90, 163, 383.
 Speechless ones, 384.
 Spell, 346.
Spheralcea angustifolia, 194.
 Spicing, 67.
 Spider, 167, 174, 507.
 Spider flower, 184, 198.
 Spider Man and Woman, 222, 352, 488.
 Spider medicine, 116.
 Spider web, 167.
 Spindle, 222, 226.
 Spindle stick, 222.
 Spinning, 226, 227.
 Spinning-wheel, 226.
 Spiral beam rope, 235, 236, 238.
 Spirit, evil, 509.
 Spirit of life, 353, 383.
 Spittle, 400.
 Spitting, 497.
 Spitting blood, 497.
 Spokesman, 422.
 Spoon, 211, 219, 284, 286.
Sporobolus cryptandrus, 191.
Sporobolus cuspidata, 190.
 Sport, 350.
 Spotted, 68.
 Spotted thunder, 61.
 Spotted wind, 78.
 Spout, 287.
 Sprain, 111.
 Spread, 398, 418.
 Spring, 32, 58, 72.
 Spring, sacred, 175.
 Spring water, 401.
 Sprinkling of ashes, 375.
 Sprinkling of incense, 418.
 Sprinkling of pollen, 400, 417, 419, 448, 490, 500.
 Sprinkling of water, 389.
 Sprinkling of weeds, 417.
 Spruce, 416.
 Spruce arrow, 418.
 Spruce bow, 418.
 Spruce collar, 390, 413.
 Spruce dress, 417.
 Spruce hoop, 416.
 Spur, 151.
 Spurge, 115, 189.
 Spurious clans, 431.
 Sputtering, 372, 373, 407, 409, 497.
 Spy, 158, 172.
 Square (figure), 251.
 Square farm, 350.
 Square hoop, 416.
 Squash, 188, 204, 211, 267.
 Squash-bug, 151.
 Squaw dance (*see* girls' dance).
 Squirrel, 141.
 Stable, 335.
 Stacked hogan, 334, 336.
 Staff of constellation, 43.
 Stake, 478, 481, 486, 487.
 Stalking, 475.
 Stammer, 90.
 Stamp, steel, 275.
 St. Andrew's cross, 251.
Stanleya pinnatifida, 187.
 Star, 42 *et seq.*, 251, 252, 280.
 Star, creation of, 353.
 Star reading, 159, 365, 410.
 Starwort, 187.
 State authorities, 439.
 Stealing, 508.
 Steam, 46, 68.
 Steamed corn gruel, 389.
 Steel, 66, 255, 269.
 Steel flint, 67.
 Steel stamp, 275.
 Stellar influence, 43.
 Stephen, A. M., 305, 308, 361, 363, 431.
 Stepping, 415.
 Stew, 206, 209, 210, 211.
 Stick, 208, 210, 235, 236, 242, 267, 287, 298.
 Stick dice, 481.
 Stick, measuring, 73.
 Stick, stirring, 218, 219, 220, 229, 233, 234.
 Stiffness, 109, 202.
 Sting, remedy for, 117.
 Stirring stick, 218, 219, 220, 229, 233, 234.
 Stitch, 256, 208 *et seq.*
 Stocking, 255.
 Stomach trouble, 114.
 Stone, 62 *et seq.*, 209, 210, 224, 229, 231, 255, 272, 273, 322.
 Stone ax, 269, 322.
 Stone disk, 301.
 Stone file, 477.
 Stone flint, 67.
 Stone house, 334.
 Stone implement, 331.
 Stone knife, 62, 308, 309, 391.
 Stone quarry, 64.
 Stone rosin, 64, 112.
 Stone seed growwell, 115, 183.
 Stone trap, 476.
 Store, 270, 274, 275.
 Storing, 267, 490.
 Storm, 46 *et seq.*, 58 *et seq.*
 Stove, 67, 219.
 Straight lightning, 352.
 Strangling, 386, 456, 476.
 Straw, 262.
 Stricture, 108.
 Strife, 439.
 Striking stick, 486.
 Striped, 68.
 Striped thunder, 61.
 Striped wind, 46.
 Struck by lightning, 60, 61.
 Study of religion, 247.
 Sty, 107.
 Sudatory, 56, 63, 340 *et seq.*, 380.
 Suda, yucca, 340.
 Sugar, 217.
 Sugar-cane, 189, 260.
 Sugar-melon, 211.
 Suicide, 350.
 Sumac, 181, 230, 232, 233, 293, 297, 308, 318, 329, 406, 416, 465.
 Sumac berry, 211.

- Sumac pitch-ochre, 345.
 Sumac pollen, 400.
 Summer, 33, 58 *et seq.*, 353.
 Summer animals, 58.
 Summer chants, 58.
 Summer houses, 334, 335.
 Summer residence, 367, 339.
 Sun, 37, 308, 353, 359, 361, 402, 438, 448.
 Sunbearer, 37, 41, 353, 357, 360.
 Sunburnt, 37.
 Sun cake, 308.
 Sunday, 59 *et seq.*
 Sun, death of, 41.
 Sun, direction to and from, 37, 46, 55.
 Sun dried, 306, 311.
 Sun, eclipse of, 41.
 Sun halo, 37, 223.
 Sunlight, 37, 40.
 Sun Man, 356, 359.
 Sun, prayerstick of, 306.
 Sunray, 37, 222, 301.
 Sunrise, 38, 39, 308.
 Sunset, 38, 39.
 Sun, sex of, 354.
 Sunstroke, 37.
 Sun trail, 354.
 Sunwise, 37, 46, 55, 363, 396, 399, 396, 447, 467, 507.
 Sunflower, 187, 323, 419, 511.
 Supplies, 367.
 Surface, 74 *et seq.*
 Surface coal, 388, 404.
 Surgery, 80, 107, 111, 112.
 Suspicion, 440, 503.
 Suspended cord, 450.
 Swallow, 160.
 Swallowing spider, etc., remedy, 116.
 Swallowing the arrow, 377, 419.
 Swamping, 304.
 Swastika, 251, 379.
 Swearing, 444.
 Sweat-bath, 341, 350.
 Sweep, 370, 339.
 Sweetbread, 307.
 Sweet potato, 187.
 Swelling, 113.
 Swimming, 49, 52, 344.
 Swing, 472.
 Swooning, 366.
 Symbol, 251, 375, 411.
 Symbolic color, 55.
 Symbolic lightning, 304, 410.
 Symbolism, religious, 350.
Symphoricarpo, 184.
 Syphilis, 108, 113.
 Syrup, 210.

 TABOO, 41, 160, 347, 251, 286, 292, 295, 339, 385, 392, 399, 430, 435, 444, 446, 447, 449, 454, 472, 496, 507, 509.
 Tache, Mgr., 39.
 Tack, 148, 269.
 Tack, wooden, 317.
 Tadpole, 157, 177, 178.
 Tail of constellation, 44.
 Talisman, 190.
 Talking God, 175, 356, 376, 398, 394, 385, 387, 398, 399, 390, 398, 430, 498, 500.
 Talking in sleep, 501.
 Tall giants, 398.

 Tallow, 70, 212, 274, 306, 372.
 Tallow glucose, 213.
 Tallow in the hide, 213.
 Tallow rolls, 213.
 Tan color, 232.
 Tanning, 302.
 Taos, 383, 400.
 Tarantula, 167.
 Tassel, 308, 222, 236, 246, 247, 309.
 Taste, 82.
 Tattoo, 74, 505.
 Taunting, 450.
 Tea, 114, 204, 389.
 Teel, 173.
Tellima tenella, 199, 405.
Teloxia cornuta, 185.
 Temper, 273.
 Temperature, 53 *et seq.*
Tendo Achillis of deer, 412.
 Tewa Indian, 24, 25, 26.
 Texas ranger, 187.
 Textile fabric, 292.
 Textile industry, 391 *et seq.*
Thalicttrum Fendleri, 197.
 Thaw, 48.
 The Navaho Shoemaker, A. M. Stephen, 308.
Thellipodium Wrightii, 113, 188.
 Therapeutics, 106.
 Thick medicine (*bot.*), 115.
Thlaspi, 186.
 Thong, 159, 265, 279, 306, 306, 312, 328, 386, 414, 419, 458, 469, 470, 483.
 Thorn apple, 199.
 Thorn-bush, 174.
 Thoroughwort, 186, 405.
 Thought, 87.
 Thread, 306.
 Three ears, 305.
 Three tied (food), 306.
 Threshing, 363.
 Throat, sore, 108.
 Thumb, 69, 238.
 Thunder, 43, 60 *et seq.*, 251, 353.
 Thunder arrow, 406.
 Thunder constellation, 43.
 Time, told, 37, 39.
 Tin can, 216.
 Tinware, 287, 298.
 Tinnah nations, 37.
 Tinder, 65.
 Tinderbox, 65, 67.
 Tingling maiden, 360.
 Tip, 387, 415, 417, 418.
 Titmouse, 160.
 Toad, 156, 177.
 Toad flax, 198.
 Toadstool, 304.
 Tobacco, 171, 200, 394 *et seq.*, 396, 506.
 Tobacco worm, 177.
 Toe rattle, 367.
 Tongs, 275.
 Tonic, universal, 114.
 Tools for burial, 508.
 Tools, modern, 368, 369.
 Toothache, 108.
 Toothache medicine, 112.
 Tooth-gum medicine, 113.
 Tooth-gum wind chant, 364.
 Top spinning, 488.

- Torch, 375.
 Tortoise, 157, 177, 251.
 Tortoise shell, 301, 407.
 Tossing a coin, 486.
 Totemism, 424.
 Touch, divination by, 365.
 Touch, faculty of, 88 *et seq.*
 Towel, 340.
Townsendia, 116.
Townsendia serica, 185.
Townsendia strigosa, 114, 187.
 Toy gun, 324.
Tqodich-ini clan, 356, 427.
Tqotsani clan, 358, 427.
 Track, figure of, 253.
 Tracking bear, 139.
 Tracking monster, 358.
 Track snake, 155, 176, 251, 396.
 Trader, 64, 277, 490.
 Tradition, 29, 30, 180, 223, 285, 296, 309, 425, 426, 446.
 Trail of beauty, 43.
 Trail of rainbow, 46.
 Trail of sun and moon, 37, 354.
 Training of warrior, 437.
 Transportation, 268, 286, 331, 337, 398, 509.
 Transportation of a corpse, 454.
 Transportation of a trophy, 374.
 Trap, 322.
 Trap dyke people, 429.
 Trapping game, 475, 477.
 Travel, 151.
 Tray of bark, 69.
 Treaty of 1968, 126.
 Treaty reservation, 31.
 Tree, 203, 235, 353.
 Tree broken by winds, 469.
 Tree rosin, 112.
 Trembling, 110.
 Triangle, 251.
 Tribal government, 382, 422 *et seq.*
 Tribal names, 127, 128.
Tribulus maximus, 201, 395.
Trifolium errocephalum, 193.
 Trinket, 276.
 Trophy, 366, 374, 375, 484.
 Trough, 269.
Tseili, 264.
 Tube, 272, 273, 274, 393.
 Tuesday, 60.
 Tumbleweed, 405.
 Tumor, 110.
 Tunicha Range, 31.
 Turkey, 159, 172, 213, 214, 318, 351, 365.
 Turkey buzzard, 159.
 Turkey feather, 159, 222, 367, 389, 417, 461, 462.
 Turkey feet, 483.
 Turkey people, 428.
 Turkey tassel, 159.
 Turkey track, 159.
 Turning a stone, 454.
 Turquoise, 56, 64, 68, 222, 284, 301, 312, 328, 389, 399, 402, 404, 410, 414, 464, 470, 489.
 Turquoise charm, 411.
 Turquoise mountain, 136.
 Turtle, 157, 177, 214, 251, 507.
 Turtledove, 180, 213.
 Tweezer, 83, 284.
 Twelfth world, 352.
 Twelve antelope monsters, 358.
 Twig, 182.
 Twig inserted, 329, 339.
 Twigbill crane, 173, 408.
 Twig shuttle, 237.
 Twilight, 36, 40, 251, 349.
 Twilight Man and Woman, 355.
 Twin, 450.
 Twin colts, 451.
 Twin rock people, 429.
 Twine, 249.
Typha latifolia, 200.
 UMBRELLA, 40, 255.
 Uncle, 119.
 Under ledge of rock people, 352.
 Under worlds, 35.
 Underground water, 32.
 United States National Museum, Proceedings of, 308.
 Universe, 35.
 Unraveling, 68, 186, 222, 411, 415 *et seq.*, 417.
 Unwinding medicine, 186.
 Upper, the, 36, 137.
 Uppers, 295, 308, 305, 306.
 Upper world, 351.
 Upright, 235, 236, 243, 249.
 Urine, 232.
 Ursa major, 44.
 Ute, 64, 246, 302, 309, 362, 368, 372, 374, 438, 457.
 Ute blanket, 247.
 Ute clan, 426, 430.
 VALLEY, 32, 61 *et seq.*
 Vari-colored stone, 410.
 Variegated bead mountain, 137.
 Vault of sky, 35, 36.
 Vault of lower worlds, 36.
 Vegetable dye, 231 *et seq.*
 Vegetables, modern, 217.
 Vegetation, 203, 257, 353.
 Venereal excess, 350, 379.
 Venison, 204, 213, 437.
Verbena, 201.
Verbesina enceloides, 114.
 Vermin, 341.
 Vervain, 200.
Vesicaria alpina, 188.
Vesicaria Fendleri, 188.
 Vetch, 115, 192.
Viburnum, 184.
Vicia Americana, 192.
 Vigil, 207, 329, 355, 378, 389, 398, 411, 420, 424.
 Village, 265, 349.
 Violence, 366.
 Virgin, 118, 350, 449.
 Virginia creeper, 201, 408.
 Virginity, 450.
 Virgin's bower, 197.
 Vitality, impaired, 114.
 Volcanic activity, 32.
 Vomiting, remedy for, 115.
 WADING, 52 *et seq.*
 Wagon, 151, 273, 509, 510.
 Walling, 455.
 Waistcloth, 460.
 Walking, 66.
 Walking in sleep, 501.
 Walking on cactus, 419.

- Walled hogan, 333.
 Walnut, 31, 191, 211.
 Wandering stone, 357.
 War, 25, 119, 120, 121, 308, 309, 362, 423, 437.
 War chief, 423, 437.
 War dance, 70, 119, 289, 362, 363, 375, 413, 428, 511.
 War dance equipment, 404.
 War dance liniment, 405.
 War dance medicine, 409.
 War gods, 428.
 War name, 119.
 Warpath, going on, 374.
 War rite, 362, 375.
 War singer, 362, 368 *et seq.*, 438.
 Wardrobe, 341.
 Warning, 454, 509.
 Warp, 235, 236, 237, 238, 250.
 Warp frame, 236.
 Warp stick, 232.
 Warp strand, 235, 236, 237, 238, 240, 241.
 Warrior, 437, 456.
 Washing, 49, 51, 340.
 Washing beads, 452.
 Washing wool, 224.
 Washington, D. C., 138.
 Wasp, 166.
 Water, 35, 36, 39 *et seq.*
 Water animals, 156, 507.
 Water ashes, 401.
 Water-bag, 298.
 Water bottle, 286, 297.
 Water-bug, 157.
 Water chant, 368, 401.
 Water, Child of, 360, 366, 375, 385, 387, 388, 391, 411, 417.
 Watercress, 116, 187, 188, 416.
 Water-dog, 157.
 Water-drops, 50.
 Waterfall, 36, 359.
 Waterfowl, 160.
 Water-horse, 177, 251, 359.
 Watering stock, 49 *et seq.*
 Water jar, 447.
 Water lizard, 177.
 Watermark, 72.
 Watermelon, 189, 211.
 Water Monster, 349, 357.
 Water-ox, 177, 251, 351, 359.
 Water paunch, 298.
 Water pollen, 400.
 Waterpot, 286.
 Waterproof, 241.
 Water, sacred, 288.
 Water-snake, 176.
 Water Sprinkler, 379, 384, 388, 390, 392, 500, 502.
 Water's edge people, 429, 430.
 Wave, 50.
 Wearing a hat, 460.
 Weasel, 425.
 Weave, 243, 245.
 Weave, regular, 243, 245.
 Weaving, 221 *et seq.*, 237, 238, 297, 308, 327, 494, 458.
 Weaving implements, 240.
 Weather, 53 *et seq.*
 Web, 352.
 Wedding basket, 206, 447, 448, 449.
 Wedding feast, 447.
 Wedge, 272.
 Weed, 267, 417.
 Weeping, 510.
 Weeping willow, 469.
 Weight, 152, 225, 237, 238.
 Wheat, 191, 204, 207, 262.
 Wheat raising, 262.
 Where two went to water people, 422.
 Whip, 150, 318.
 Whipping, 104, 469.
 Whipping God, 363, 385, 386, 390, 391, 392.
 Whip-poor-will, 161, 172, 254.
 Whirl, 65 *et seq.*
 Whirlwind, 46.
 Whisk broom, 80, 240.
 Whiskey, 217.
 Whiskey Creek, 264.
 Whisper, 90.
 Whistle, 141, 408, 418, 511.
 Whistling, 507, 511.
 Whistling God, 385.
 White, 68, 246 *et seq.*
 White awl, 205.
 White bead mountain, 126.
 White clay, 65, 68, 69, 377, 388, 389, 404, 410, 446, 461.
 White cloud, 45.
 White clover, 192.
 White cornmeal, 408, 448.
 White eagle, 237.
 White earth, 249.
 White fish, 178.
 White ice, 48.
 White light, 56.
 White medicine, 115.
 White mirage, 41.
 White mist, 46.
 White moss, 176.
 White Mountain Apache, 428.
 White Mountain Apache clan, 421.
 White of dawn, 36.
 White sage, 114, 185.
 White shawl, 246.
 White shell, 56, 222, 301, 328, 355, 384, 402, 410, 470.
 White shell mountain, 61.
 White shell woman, 355.
 White stone, 64.
 White thunder, 61, 257.
 White wind, 46.
 Whitening silver, 275.
 Whitlow grass, 112, 187.
 Whole cradle, 469.
 Whorl, 226, 242.
 Wick, 270, 274.
 Wicker bottle, 267, 296, 297.
 Wicker bottle, Palute, 391.
 Wicker jar, 297, 298.
 Wickerwork, 297.
 Wide hoop, 416.
 Widow, 118, 422.
 Widower, 433.
 Widowhood, 433.
 Wife, 118.
 Wife of Sun, 255.
 Wig, 81.
 Wildcat, 140, 175, 214, 356.
 Wildcat cap, 461.
 Wildcat Chief, 349.
 Wildcat rite, 474.

- Wild cherry, 192, 198, 211, 329, 396, 403, 404, 409, 416.
 Wild currant, 318.
 Wild grape, 432.
 Wild rose, 197, 211.
 Wild rye, 190.
 Wild sunflower, 405.
 Wild tobacco, 199, 394.
 Willow, 198, 243, 273, 297, 298, 396, 469.
 Willow herb, 115, 195.
 Willow people, 439.
 Willows people, 439.
 Wind, 46, 222, 346, 349, 353, 365.
 Wind break, 335.
 Wind chant, 208, 343, 401.
 Windmill, 53.
 Wind people, 46, 352.
 Windstorm, 53.
 Winding stitch, 306, 387.
 Window, 40.
 Wine, 217.
 Wingless insects, 167 *et seq.*
 Winning of a basket, 295.
 Winnow, 262.
 Winter, 32, 58 *et seq.*, 353.
 Winter animals, 58.
 Winter birds, 159.
 Winter chants, 58.
 Winter fat, 185.
 Winter months, 485, 488, 507.
 Winter residence, 329.
 Wire, 269, 274, 276, 279, 281, 319.
 Wire, silver, 284.
 Witch, 505.
 Witch chant, 396, 401, 402, 412, 414, 415, 416, 417, 418, 451, 511.
 Witch chant equipment, 404.
 Witch chant medicine, 409.
 Witchcraft, 105, 139, 172, 346, 348, 349, 350, 359, 362, 375.
 Wolf, 140, 175, 214, 351, 365.
 Wolf rite, 474.
 Woman, names of, 121.
 Woman transformed into bear, 139, 360.
 Woman's dress, 245, 246, 247, 460.
 Woman's industry, 298, 392.
 Woman's sash, 248, 249.
 Wood, 273, 274.
 Woodawl, 314.
 Wood flint, 67.
 Wood hoe, 266.
 Wooden needle, 309.
 Wooden shoe, 47, 311.
 Wooden tube, 272.
 Woodpecker, 160, 173.
 Woof-strand, 243.
 Wool, 224, 228, 407, 458.
 Wool brush, 304.
 Wool-card, 225.
 Wool cord, 470.
 Wool rope, 249, 314.
 Woolly cap, 460.
 World, 35.
 Worm, 169.
 Wormwood sagebrush, 116, 399.
 Worry, 443.
 Worship, 139, 346.
 Wreath, 417.
 Wren, 161, 162.
 Wrist-guard, 312, 319.
 Wrist measure, 73.
 Wristlets, 281, 372, 413 *et seq.*
 Write, 74.
 XANTHIUM STRUMARIUM, 185.
Xymenopappus filifolius, 186.
 YARD-BEAM, 235, 236, 238.
 Yarn, 230, 232, 237, 244, 255, 407.
 Yarrow, 115, 186, 371, 409.
 Year, division of, 58.
Yelbichai, 364, 498, 500.
Yelbichai dance, 309, 377, 384.
Yeliso, 29, 357, 360, 366.
 Yellow, 68.
 Yellow Ant, 349.
 Yellowbird, 159, 213, 387, 389, 394.
 Yellow clay, 65, 68.
 Yellow cloud, 45.
 Yellow corn pollen, 448.
 Yellow disease, 110.
 Yellow dye, 230, 231, 304.
 Yellow fish, 173.
 Yellow fox, 175, 390.
 Yellow fox collar, 390, 413.
 Yellow house people, 439.
 Yellow ice, 48.
 Yellow Knives Indians, 28.
 Yellow light, 40, 58.
 Yellow mirage, 41.
 Yellow mist, 46.
 Yellow moss, 176.
 Yellow ochre, 69.
 Yellow thistle, 185.
 Yellow thunder, 61.
 Yellow wind, 46.
 Yucca, 32, 68, 141, 194, 208, 210, 222, 224, 457, 487, 498.
 Yucca basket, 295.
 Yucca bath, 49, 340.
 Yucca blanket, 457.
 Yucca brush, 68.
 Yucca cord, 327.
 Yucca fruit, 210, 298.
 Yucca knot, 415.
 Yucca lash, 499.
 Yucca legging, 460.
 Yucca mask, 384, 417.
 Yucca mat, 327, 467.
 Yucca moccasin, 295, 308.
 Yucca People, 349.
 Yucca sole, 305.
 Yucca spur, 308.
 Yucca star, 415.
 Yucca strips, 417.
 Yucca strung out people, 428.
 Yucca suds, 80, 432.
 Yucca wristlets, 372.
 ZEBRA, 142.
 Zenith, 96, 55, 137.
 Zia clan, 426, 428.
 Zigzag, 74, 252.
 Zigzag lightning, 60, 222, 251, 318, 352, 390.
 Zinnia, 112, 187.
 Zoolatry, 139, 171.
 Zuni, 33, 129, 306, 213, 275, 300, 398, 425, 439.
 Zuni clan, 430, 431.
 Zuni pot, 232.
 Zuni salt lake, 400, 410.
Zygadenus venenosus, 193.

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